
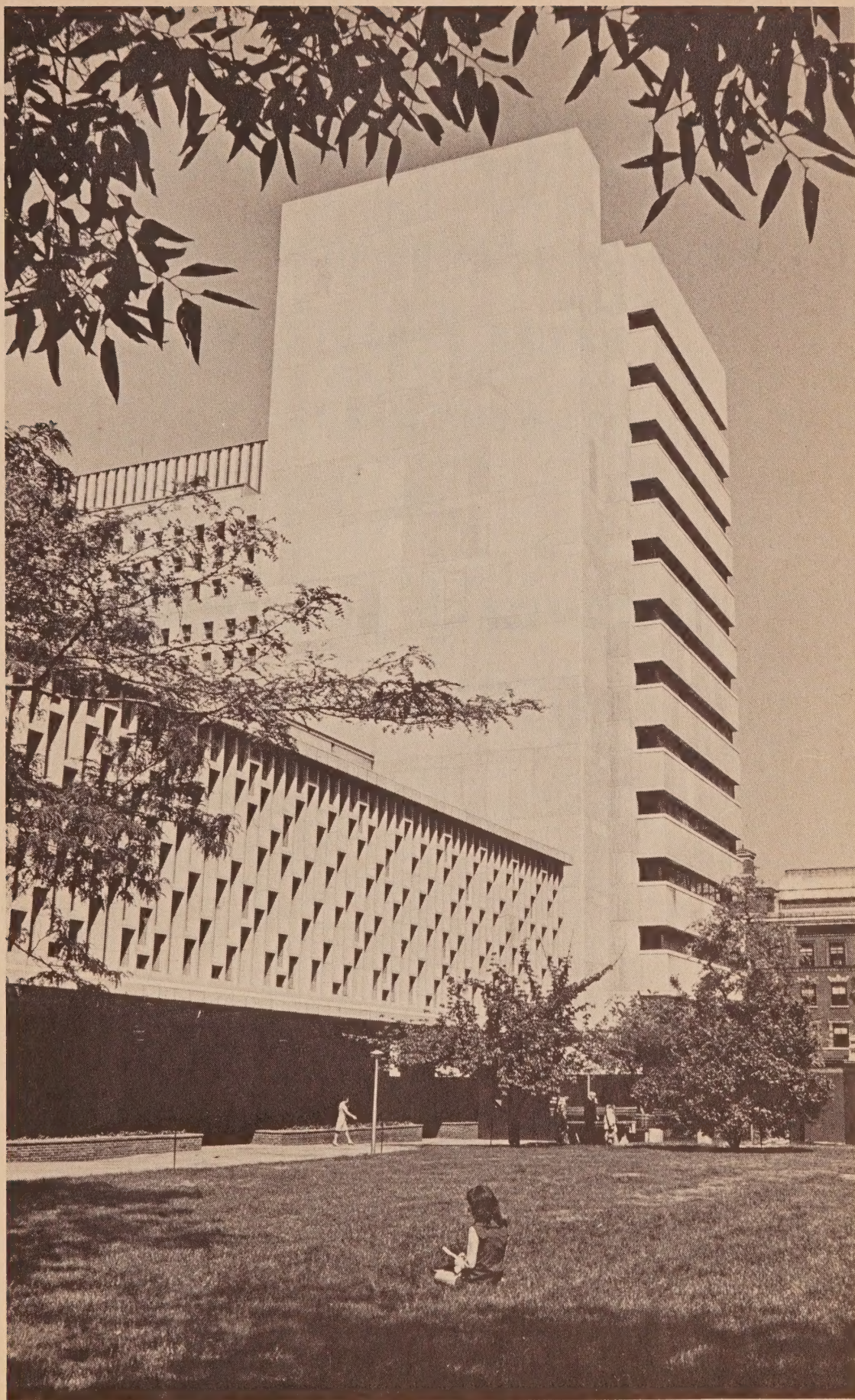


JEAN T. PALMER



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Barnard College



BARNARD COLLEGE

THE UNDERGRADUATE COLLEGE

OF LIBERAL ARTS

FOR WOMEN

OF

Columbia University

1969—1970

MORNINGSIDE HEIGHTS

NEW YORK, N. Y. 10027

COMMUNICATION WITH THE COLLEGE

The post office address is Barnard College, 606 West 120th Street, New York, N.Y. 10027. The telephone number is (Area Code 212) 280-1754.

Inquiries should be addressed as follows:

General matters pertaining to the College; gifts or bequests: the General Secretary

Admission to the freshman class or with advanced standing; information about financial aid for entering students; requests for catalogues: the Director of Admissions

Financial aid and loan funds for students in college; notice of withdrawal: the Dean of Studies

Academic work of students: the Class Advisers

Health: the College Physician

Housing: the Director of Residence

Student Activities: the Director of the Millicent McIntosh Center

Opportunities for self-help; recommendations for employment: the Placement Office

Payment of college bills: the Bursar

Requests for transcripts: the Registrar

Alumnae: the Executive Secretary of the Associate Alumnae

Public relations: the Director of Public Relations

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SEPTEMBER 1969

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CALENDAR
FOR 1969-1970

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DECEMBER 1969

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APRIL 1970

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AUGUST 1970

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JANUARY 1970

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MAY 1970

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SEPTEMBER 1970

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27	28	29	30			

I. College Calendar 1969–1970

- Aug. 1** Friday. Last day for refund of Autumn Term deposit.
- Sept. 2** Tuesday. Final payments due, Autumn Term.
- 22** Monday, through Sept. 24, Wednesday. Registration in person for Autumn Term. Deferred examinations.
- 25** Thursday. Autumn Term, eighty-first year begins. Classes begin 9 a.m. Convocation, 1 p.m.
- Oct. 3** Friday. Last day for adding a course, Autumn Term.
- 24** Friday. Last day for filing diploma name card for the degree in February 1970.
- 29** Wednesday. Award of October degrees.
- Nov. 4** Tuesday. Election Day. Holiday.
- 12** Wednesday. Midterm date.
- 25** Tuesday. Annual Thanksgiving Service in St. Paul's Chapel.
- 27** Thursday through Nov. 30, Sunday. Thanksgiving holidays.
- Dec. 1** Monday. Last day for refund of Spring Term deposit.
- 2** Tuesday. Required meetings for planning programs.
- 12** Friday. Last day for filing Spring Term programs, or for dropping a course, Autumn Term.
- 20** Saturday, through Jan. 4, 1970, Sunday. Christmas holidays. Residence halls closed.
- Jan. 7** Wednesday, through Jan. 9, Friday. Major examinations for February graduates.
- 15** Thursday. Final payments due, Spring Term.
- 18** Sunday. Annual Commemoration Service in St. Paul's Chapel.
- 19** Monday. Midyear examinations begin.
- 29** Thursday. Autumn Term ends.
- Feb. 2** Monday and Feb. 3, Tuesday. Registration in person for Spring Term.
- 4** Wednesday. Spring Term begins. Classes begin 9 a.m.
- 6** Friday. Last day for filing application for financial aid.
- 13** Friday. Last day for adding a course, Spring Term.

BARNARD COLLEGE

- Feb. 20** Friday. Last day for filing diploma name card for the degree in June 1970.
- 25** Wednesday. Award of February degrees.
- Mar. 4** Wednesday, through Mar. 6, Friday. Deferred examinations for students absent from the January 1970 series.
- 27** Friday. Midterm date.
- 28** Saturday, through Apr. 5, Sunday. Spring holidays.
- Apr. 10** Friday. Last day for dropping a course or point, Spring Term.
- 22** Wednesday, through Apr. 24, Friday. Major examinations for June and October graduates.
- 23** Thursday. Required meetings for planning programs.
- May 1** Friday. Last day for filing Autumn Term programs and diploma name card for the degree in October 1970.
- 18** Monday. Final examinations begin.
- 28** Thursday. Spring Term ends.
- 31** Sunday. Baccalaureate Service.
- June 2** Tuesday. Conferring of degrees.
- Sept. 24** Thursday. Autumn Term, 1970, eighty-second year begins. Classes begin 9 a.m. Convocation, 1 p.m.

II. Organization

TRUSTEES OF BARNARD COLLEGE

WALLACE S. JONES, *Chairman*

FRANCIS T. P. PLIMPTON, *Vice-Chairman*

ROBERT L. HOGUET, *Vice-Chairman*

MRS. FRANK ALTSCHUL, *Clerk*

MRS. HUGH AUCHINCLOSS

HENRY CHAUNCEY

ACTING PRESIDENT ANDREW W. CORDIER, *ex officio*

WALTER J. P. CURLEY, JR.

MRS. JOHN ELLIOTT, JR.

RICHARD M. FURLAUD

ARTHUR J. GOLDBERG

MRS. WILLIAM T. GOSSETT

MRS. IOLA S. HAVERSTICK

WILLIAM A. MARSTELLER

WILLIAM H. MATHERS

SAMUEL R. MILBANK

MISS MARTHA PETERSON

MRS. SYDNEY S. SPIVACK

MISS BARBARA M. WATSON

MRS. FREDERICK J. WOODBRIDGE

MRS. PAUL H. FLINT, *Alumnae Trustee*

MRS. N. LAWRENCE HERRICK, *Alumnae Trustee*

MRS. HENRY C. PANNELL, *Alumnae Trustee*

MRS. JOHN R. SARGENT, *Alumnae Trustee*

MRS. OGDEN REID, *Trustee Emeritus*

MRS. ARTHUR H. SULZBERGER, *Trustee Emeritus*

BARNARD COLLEGE

Faculty Representatives to Meet with Trustees

PROFESSOR DAVID ROBERTSON, JR.

PROFESSOR MARY MOTHERSILL

THE FACULTY OF BARNARD COLLEGE

ANDREW W. CORDIER, 1968, Acting President of the University
A.B., Manchester College; M.A., Ph.D., Chicago

MARTHA PETERSON, 1967, President of Barnard College and Dean in the University
A.B., M.A., Ph.D., Kansas

HENRY A. BOORSE, 1937, Dean of the Faculty and Professor of Physics
B.S., United States Naval Academy; M.A., Ph.D., Columbia

HELEN PHELPS BAILEY, 1933, Dean of Studies and Professor of French
A.B., Barnard; M.A., Ph.D., Columbia

BARBARA S. SCHMITTER, 1957, Associate Dean of Studies and Associate Professor of Psychology
A.B., Nebraska; M.A., Columbia

GIUSEPPE SANSONE, 1970, Virginia C. Gildersleeve Visiting Professor of Italian

GEORGE STRICEVIC, 1968, Visiting Assistant Professor of Art History
Ph.D., Serbian Academy of Sciences and Fine Arts

ERICA HENNEFELD ABEEL, 1965, Instructor in French
A.B., Sarah Lawrence; M.A., Columbia

HELEN H. BACON, 1961, Professor of Greek and Latin
A.B., Ph.D., Bryn Mawr

¹BERNARD BARBER, 1952, Professor of Sociology
A.B., M.A., Ph.D., Harvard

ANNETTE K. BAXTER, 1952, Associate Professor of History
A.B., Barnard; M.A., Smith, Radcliffe; Ph.D., Brown

BRIGITTE L. BRADLEY, 1962, Associate Professor of German
A.B., William and Mary; D. d'Université, Strasbourg; M.A., Ph.D., Columbia

The dates refer to the beginning of service in the College and not necessarily to the assumption of the current title.

¹ Absent on leave, 1969-70.

THE FACULTY

- ¹JOSEPH GERARD BRENNAN, 1947, Professor of Philosophy
A.B., Boston College; M.A., Harvard; Ph.D., Columbia
- LEROY C. BREUNIG, 1953, Professor of French
A.B., DePauw; Ph.D., Cornell
- PETER D. BROWN, 1967, Instructor in German
A.B., M.A., Columbia
- LAMBERTO ANTONIO CANO, 1966, Instructor in Spanish
B.B.A., Puerto Rico
- DEMETRIOS CARALEY, 1961, Professor of Political Science
A.B., Ph.D., Columbia
- PATRICIA CARPENTER, 1961, Assistant Professor of Music
A.B., California
- LUZ CASTANOS, 1967, Instructor in Spanish
A.B., M.A., Hunter
- ELIZABETH LOUISE CAUGHRAN, 1956, Associate in English
A.B., Russell Sage; M.A., Columbia
- JOY CHUTE, 1964, Adjunct Associate Professor of English
- EDWARD S. COBB, 1963, Assistant Professor of Psychology
A.B., M.A., Ph.D., Columbia
- KENNETH COOPER, 1965, Instructor in Music
A.B., M.A., Columbia
- WILLIAM A. CORPE, 1956, Professor of Biology
A.B., M.A., Wisconsin; Ph.D., Pennsylvania State
- EVA CORREDOR, 1968, Instructor in French
Dipl. de l'Ecole des Langues Orientales
- MAXINE CUTLER, 1967, Instructor in French
A.B., Barnard; Ph.D., Columbia
- ELIZABETH C. DALTON, 1965, Instructor in English
A.B., California; M.A., Ohio
- GAY A. DELANGHE, 1966, Instructor in Physical Education
A.B., M.A., Michigan
- BETTE STUBING DENITCH, 1968, Instructor in Anthropology
A.B., Antioch
- MARJORIE HOUSEPIAN DOBKIN, 1957-59; 1960, Associate in English
A.B., Barnard
- HUBERT DORIS, 1957, Associate Professor of Music
A.B., Harvard; M.A., Columbia

¹ Absent on leave, Spring Term.

BARNARD COLLEGE

¹PATRICIA L. DUDLEY, 1959, Associate Professor of Biology
A.B., M.A., Colorado; Ph.D., Washington

LOIS A. EBIN, 1969, Assistant Professor of English
A.B., Smith; M.A., Ph.D., Columbia

DAVID W. EHRENFELD, 1967, Assistant Professor of Biology
A.B., M.D., Harvard; Ph.D., Florida

JOHN T. ELLIFF, 1967, Assistant Professor of Political Science
A.B., De Pauw; M.A., Ph.D., Harvard

ANN FAGAN, 1969, Instructor in History
A.B., Carleton

PATRICIA N. FARNSWORTH, 1967, Assistant Professor of Biology
A.B., Morningside; M.S., Ph.D., Columbia

BRUCE FELD, 1968, Instructor in Political Science
B.B.A., Miami; M.A., Rutgers

ANTONIO FRANCESCHETTI, 1964, Assistant Professor of Italian
Laurea in Lettere, University of Padua; Ph.D., Columbia

RICHARD M. FRIEDBERG, 1968, Associate Professor of Physics
A.B., Harvard; M.A., Ph.D., Columbia

PATRICK X. GALLAGHER, 1965, Professor of Mathematics
A.B., Harvard; Ph.D., Princeton

THEODOR H. GASTER, 1966, Professor of Religion
A.B., M.A., London; Ph.D., Columbia; D.D., Vermont

SERGE GAVRONSKY, 1960, Associate Professor of French
A.B., M.A., Ph.D. Columbia

²RENEE GEEN, 1956, Associate Professor of French
A.B., Brooklyn; M.A., Wisconsin; Ph.D., Columbia

SANDRA GENTER, 1961, Associate in Physical Education
A.B., Wisconsin; M.A., Columbia

MARION HAMILTON GILLIM, 1952, Professor of Economics
A.B., Mount Holyoke; M.A., Ph.D., Columbia

JEAN A. GOOCH, 1964, Associate Professor of Economics
A.B., California; M.A., Ph.D., Columbia

JANE GRACE, 1968, Instructor in French
A.B., Emory; M.A., Columbia

²PATRICIA ALBJERG GRAHAM, 1965, Associate Professor of Education
B.S., M.S., Purdue; Ph.D., Columbia

TATIANA GREENE, 1946, Associate Professor of French
Candid. en Droit, Brussels; M.A., Ph.D., Columbia

¹ Absent on leave, Spring Term.

² Absent on leave, 1969-70.

THE FACULTY

- CAROLA GREENGARD, 1968, Instructor in Greek and Latin
A.B., Swarthmore
- RICHARD F. GUSTAFSON, 1965, Associate Professor of Russian
A.B., Yale; Ph.D., Columbia
- DANIELLE HAASE-DUBOSC, 1962, Assistant Professor of French
A.B., Barnard; M.A., Columbia
- ELIZABETH HARDWICK, 1965, Adjunct Associate Professor of English
A.B., M.A., Kentucky
- JULIUS S. HELD, 1937, Professor of Art History
Ph.D., Freiburg
- ANTHONY G. HENDERSON, 1964, Assistant Professor of English
A.B., Harvard; B.A., Cambridge; Ph.D., Columbia
- KENNETH H. JANES, 1961, Associate Professor of English and Director of Minor
Latham Playhouse
- PETER H. JUVILER, 1964, Associate Professor of Political Science
B.E., M.E., Yale; M.A., Ph.D., Columbia
- EDWARD KAPLAN, 1967, Instructor (Part-time) in French
A.B., Brown; M.A., Columbia
- DAVID A. KAY, 1969, Associate Professor of Political Science
A.B., Texas; M.A., Ph.D., Columbia
- CATHERINE MCA. KELLEHER, 1967, Assistant Professor of Political Science
A.B., Mount Holyoke; Ph.D., M.I.T.
- EDWARD J. KING, 1946, Professor of Chemistry
A.B., State University of Iowa; Ph.D., Yale
- RUTH M. KIVETTE, 1952, Associate Professor of English
A.B., Barnard; M.A., Ph.D., Columbia; B.D., Union Theological Seminary
- MORTON KLASS, 1965, Professor of Anthropology
A.B., Brooklyn; Ph.D., Columbia
- MIRRA KOMAROVSKY, 1934, Professor of Sociology
A.B., Barnard; M.A., Ph.D., Columbia
- STEPHEN E. KOSS, 1966, Associate Professor of History
A.B., M.A., Ph.D., Columbia
- JOHN KOUWENHOVEN, 1946, Professor of English
A.B., Wesleyan; M.A., Ph.D., Columbia
- ¹POLYKARP KUSCH, 1962, Professor of Physics
B.S., Case Institute; M.S., Ph.D., Illinois; Nobel Laureate; Sc.D.

¹ Joint appointment with Columbia.

BARNARD COLLEGE

- SUE HOWARD LARSON, 1965, Associate Professor of Philosophy
A.B., Ph.D., Stanford
- MARINA LEDKOVSKY, 1969, Assistant Professor of Russian
Ph.D., Columbia
- ETHNA LEHMAN, 1968, Assistant Professor of Sociology
A.B., College of New Rochelle; M.A., Fordham; Ph.D., Columbia
- LYDIA H. LENAGHAN, 1962, Associate Professor of Greek and Latin
A.B., Barnard; M.A., Ph.D., Bryn Mawr
- LINDA LERNER, 1968, Instructor in Physical Education
B.S., Skidmore; M.A., Columbia
- MARISTELLA DE PANIZZA LORCH, 1951, Professor of Italian
Dott. in Lett. e Filos, Rome
- JOSEPH L. MALONE, 1967, Assistant Professor of Linguistics
A.B., M.A., Ph.D., California
- PAUL T. MARAMALDI, 1968, Instructor in German
A.B., St. Peter's College; M.A., Johns Hopkins
- EDITH MASON, 1956, Associate in Physical Education
B.S., Winthrop; M.S., Louisiana State
- BARBARA MATES, 1962, Assistant Professor of Psychology
A.B., M.A., Brooklyn; M.A., Ph.D., Columbia
- ROBERT EUGENE MCGINN, 1968, Assistant Professor of Philosophy
B.S., Stevens Institute of Technology; M.S., Stanford
- JOHN MESKILL, 1960, Associate Professor of Chinese and Japanese
A.B., Harvard; Ph.D., Columbia
- GLADYS MEYER, 1948, Associate Professor of Sociology
A.B., Wellesley; Ph.D., Columbia
- DEBORAH D. MILENKOVITCH, 1965, Assistant Professor of Economics
A.B., Radcliffe; Ph.D., Columbia
- BARBARA S. MILLER, 1968, Assistant Professor of Oriental Studies
A.B., Barnard; M.A., Columbia; Ph.D., Pennsylvania
- ELLEN MOERS, 1968, Adjunct Assistant Professor of English
A.B., Vassar; M.A., Radcliffe; Ph.D., Columbia
- JOANN RYAN MORSE, 1957, Assistant Professor of English
A.B., Vassar; M.A., Yale
- MARY MOTHERSILL, 1963, Professor of Philosophy
A.B., Toronto; M.A., Ph.D., Radcliffe
- RICHARD A. NORMAN, 1954, Associate Professor of English
A.B., George Washington; M.A., Ph.D., Columbia

THE FACULTY

- BARBARA NOVAK, 1958, Associate Professor of Art History
A.B., Barnard; M.A., Ph.D., Radcliffe
- DOROTHEA NYBERG, 1968, Associate Professor of Art History
A.B., Toronto; M.A., Ph.D., New York University
- MARIA MARCH DE ORTI, 1965-67; 1968, Assistant Professor of Spanish
A.B., California; M.A., Washington; Ph.D., Columbia
- DONALD PACE, 1968, Instructor in English
A.B., Washington; M.A., Columbia
- DANIEL PAGET, 1967, Associate in Music
A.B., M.A., Columbia
- REMINGTON P. PATTERSON, 1955, Associate Professor of English
A.B., M.A., Ph.D., Yale
- THOMAS B. PERERA, 1966, Assistant Professor of Psychology
A.B., M.A., Ph.D., Columbia
- MARION R. PHILIPS, 1945-55; 1958, Assistant Professor of Physical Education
A.B., Hunter; M.A., Columbia
- RANDOLPH D. POPE, 1969, Instructor in Spanish
Lic. en Leng. y Lit. Espanola Universidad Catolica de Valparaiso
- ANNE LAKE PRESCOTT, 1959-62; 1963, Assistant Professor of English
A.B., Barnard; M.A., Ph.D., Columbia
- SELMA DE LA QUERIERE, 1967, Instructor (Part-time) in French
A.B., Brooklyn; M.A., New York University
- BASIL RAUCH, 1941, Professor of History
A.B., Notre Dame; Ph.D., Columbia
- HERMINE RIFFATERRE, 1961, Assistant Professor of French
A.B., Hunter; M.A., Columbia; B. es L., Toulouse; Ph.D., Columbia
- DONALD D. RITCHIE, 1948, Professor of Biology
A.B., B.S., Furman; M.A., Ph.D., North Carolina
- DAVID A. ROBERTSON, JR., 1940, Millicent Carey McIntosh Professor of English
A.B., M.A., Ph.D., Princeton
- JEANETTE SCHLOTTMANN ROOSEVELT, 1951-58; 1962, Associate in Physical Education
B.S., M.A., Texas Woman's University
- ELEANOR ROSENBERG, 1953, Professor of English
A.B., Barnard; M.A., Ph.D., Columbia
- ABRAHAM ROSMAN, 1966, Associate Professor of Anthropology
A.B., City University of New York; Ph.D., Yale
- CHRISTINE ROYER, 1965, Instructor in English
A.B., Western Maryland; M.A., Pennsylvania

BARNARD COLLEGE

- PAULA G. RUBEL, 1965, Assistant Professor of Anthropology
A.B., Hunter; Ph.D., Columbia
- RUTH L. RUTSCHMANN, 1965, Adjunct Assistant Professor of Psychology
A.B., Skidmore; M.A., Ph.D., New School for Social Research
- MAIRE SAID, 1968, Assistant Professor of English
A.B., Vassar; Ph.D., Harvard
- GERTRUDE M. SAKRAWA, 1952, Assistant Professor of German
M.A., Columbia; Ph.D., Vienna, Columbia
- JOHN E. SANDERS, 1969, Professor of Geology
A.B., Ohio Wesleyan; Ph.D., Yale
- ANATOL K. SAPRONOW, 1966, Associate in Russian
Russian Gymnasium, Belgrade
- MARIANNA GREENE SAPRONOW, 1967, Associate in Russian
Russian Gymnasium, Munich
- RAYMOND J. SAULNIER, 1938, Professor of Economics
B.S., Middlebury; M.A., Tufts; Ph.D., Columbia
- MARVIN SCHULMAN, 1968, Instructor in German
A.B., Coe College; M.A., Columbia
- BERNICE SEGAL, 1958, Associate Professor of Chemistry
A.B., Radcliffe; Ph.D., Columbia
- MIRELLA d'AMBROSIO DE SERVODIDIO, 1964, Assistant Professor of Spanish
A.B., Barnard; M.A., Ph.D., Columbia
- MAURICE Z. SHRODER, 1965, Professor of French
B.S., Northwestern; M.A., Ph.D., Harvard
- AUDREY C. SMOCK, 1965, Assistant Professor of Political Science
A.B., Wellesley; M.A., Ph.D., Columbia
- JOHN B. SNOOK, 1968, Assistant Professor of Religion
A.B., Harvard; B.D., Union Theological Seminary; Ph.D., Columbia
- LOUISE G. STABENAU, 1925, Associate Professor of German
Abitur, Bremen; A.M., Columbia
- ²HAROLD STAHLER, 1957, Professor of Religion
A.B., Dartmouth; B.D., Union Theological Seminary; Ph.D., Cambridge
- DOMNA CALLIMANOPULOS STANTON, 1962, Assistant Professor of French
A.B., Wellesley; M.A., Columbia
- ²EMMA DIETZ STECHER, 1945, Professor of Chemistry
A.B., Barnard; M.A., Columbia; Ph.D., Bryn Mawr
- ¹CATHARINE R. STIMPSON, 1963, Assistant Professor of English
A.B., Bryn Mawr; B.A., Cambridge; Ph.D., Columbia

¹ Absent on leave, Autumn Term.

² Absent on leave, Spring Term.

THE FACULTY

HOWARD M. TEICHMANN, 1946, Adjunct Professor of English
A.B., Wisconsin

ELEANOR M. TILTON, 1950, Professor of English
A.B., Mount Holyoke; M.A., Boston; Ph.D., Columbia

ZOYA A. TRIFUNOVICH, 1959, Associate in Russian
B.S., M.A., Columbia

MARGARITA UCELAY, 1943, Professor of Spanish
Bach. Instituto-Escuela de Madrid; M.A., Ph.D., Columbia

BARRY ULANOV, 1951, Professor of English
A.B., Ph.D., Columbia

JOAN E. VINCENT, 1968, Assistant Professor of Anthropology
B.Sc., London School of Economics; M.A., Chicago; Ph.D., Columbia

FREDERICK E. WARBURTON, 1963, Associate Professor of Biology
B.Sc., M.Sc., Ph.D., McGill

SUZANNE F. WEMPLE, 1966, Assistant Professor of Italian
A.B., California; M.L.S., Ph.D., Columbia

CHILTON WILLIAMSON, 1942, Professor of History
A.B., M.A., Ph.D., Columbia

GEORGE WOODBRIDGE, 1960, Associate Professor of History
A.B., M.A., Columbia; Ph.D., Wisconsin

RICHARD YOUTZ, 1937, Professor of Psychology
A.B., Carleton; Ph.D., Yale

LEONARD ZOBLER, 1955, Professor of Geography
B.S., M.S., Washington State; Ph.D., Columbia

FORREST L. ABBOTT, 1953, Treasurer and Controller
B.S., Southwest Missouri State Teachers; M.A., Ed.D., Columbia

ROBERT B. PALMER, 1967, Librarian
M.A., Middlebury; M.S., Simmons

HELEN LAW, 1952, Registrar and Secretary to the Faculty
A.B., New Rochelle

MARJORY J. NELSON, 1948, College Physician
A.B., Barnard; M.D., Cornell

FACULTY EMERITI

WILLIAM HALLER, 1909-1950, Professor Emeritus of English
Ph.D., L.H.D.

FLORENCE DE LOISELLE LOWTHER, 1914-1950, Professor Emeritus of Zoology
Ph.D.

BARNARD COLLEGE

ELIZABETH FAULKNER BAKER, 1919-1952, Professor Emeritus of Economics
Ph.D.

HUGH WILEY PUCKETT, 1916-1953, Professor Emeritus of German
Ph.D.

HELEN R. DOWNES, 1933-1960, Professor Emeritus of Chemistry
Ph.D.

AMELIA A. DE DEL RIO, 1930-1962, Professor Emeritus of Spanish
Ph.D.

MILLCENT G. MCINTOSH, 1947-1962, President Emeritus
Ph.D., LL.D., Litt.D., L.H.D.

MARGARET HOLLAND, 1926-1964, Professor Emeritus of Physical Education
M.A.

THOMAS P. PEARDON, 1923-1965, Professor Emeritus of Political Science
Ph.D.

W. CABELL GREET, 1926-1966, McIntosh Professor Emeritus of English
Ph.D., Litt.D.

ESTHER GREENE, 1944-1967, Librarian Emeritus
A.B., B.S.

LUCYLE HOOK, 1948-1967, Professor Emeritus of English
Ph.D.

MARION LAWRENCE, 1929-1967, Professor Emeritus of Art History
Ph.D.

HENRY S. SHARP, 1941-1967, Professor Emeritus of Geology
Ph.D.

OTHER OFFICERS OF INSTRUCTION

JOHN C. ALEXANDER, 1967, Instructor (Part-time) in Modern Greek
A.B., Tufts; M.A., Columbia

INA B. ALTERMAN, 1966, Assistant in Geology and Geography
A.B., City University of New York

ALVIN L. ATKINS, 1966, Lecturer in Psychology
A.B., Yale; M.A., Ph.D., Columbia

SHEILA BASSMAN, 1968, Assistant in Chemistry
A.B., Barnard

LLOYD T. DELANY, 1968, Lecturer in Psychology

LINDA R. FERBER, 1966, Assistant in Art History
A.B., Barnard

THE FACULTY

- LANNY FIELDS, 1968, Lecturer in Psychology
A.B., Ph.D., Columbia
- LEA FISCHBACH, 1968, Assistant in Chemistry
A.B., Barnard
- ANNETTE B. FOX, 1966, Lecturer in Political Science
A.B., Ph.D., Chicago
- BARBARA GOODSTEIN, 1967, Assistant in Chemistry
A.B., Barnard
- LINDA B. GREENBERG, 1967, Assistant in Biology
A.B., City College of New York
- MARGARET HANCE, 1955, Assistant in English
A.B., Wittenberg
- GRACE W. KING, 1960, Lecturer in Chemistry
A.B., Maine; Ph.D., Yale
- PATRICIA H. LABALME, 1961-64; 1965, Lecturer in History
A.B., Bryn Mawr; M.A., Ph.D., Radcliffe
- RUTH M. MATHEWSON, 1964, Instructor (Part-time) in English
A.B., Vassar
- JANE D. MOORMAN, 1969, Lecturer in Psychology
B.A., Austin; M.Ed., University of Colorado; Ph.D., University of Kansas
- BRIAN S. OVERSBY, 1967, Assistant in Geology and Geography
B.S., Southampton; M.S., Columbia
- IN-HO RYU, 1967, Instructor (Part-time) in History
A.B., Wellesley; M.A., Radcliffe; Ph.D., Harvard
- ANNA MARIA SACHKO, 1966, Assistant in Economics
A.B., Barnard
- MARJORIE SCHULTE, 1967, Assistant in Psychology
A.B., Barnard
- JANET SOARES, 1968, Assistant in English
B.S., Juilliard
- P. NICO SOLINAS, 1967, Instructor in Italian
- SANDRA STINGLE, 1967, Assistant in Psychology
A.B., Barnard
- PATRICIA TERRY, 1958, Lecturer in French
A.B., Wellesley; M.A., Ph.D., Columbia
- JANICE FARRAR THADDEUS, 1956, Lecturer in English
A.B., Barnard; M.A., Ph.D., Columbia
- LINDA YELLEN, 1969, Assistant in Italian
A.B., Barnard

BARNARD COLLEGE

OFFICERS OF ADMINISTRATION

MARTHA PETERSON, Ph.D.

President of Barnard College and Dean in the University

HENRY A. BOORSE, Ph.D.

Dean of the Faculty and Professor of Physics

HELEN PHELPS BAILEY, Ph.D.

Dean of Studies and Professor of French

FORREST L. ABBOTT, Ed.D.

Treasurer and Controller

OFFICE OF THE PRESIDENT

JANE MOORMAN, Ph.D.,

Assistant to the President

DOROTHY H. HEFFERLINE, M.A.

Administrative Assistant

NOVELLA I. LANDAU

Secretary to the President

OFFICE OF THE DEANS

BARBARA S. SCHMITTER, M.A.

Associate Dean of Studies and Associate Professor of Psychology

CHRISTINE ROYER, M.A.

Adviser to the Class of 1971

MIRELLA DE SERVODIDIO, Ph.D. }

Advisers to the Class of 1972

DOMNA STANTON, M. A. }

GRACE KING, Ph.D.

Adviser to the Class of 1973

LOUISE G. STABENAU, M.A.

Adviser to the Class of 1973
and Adviser to Foreign Students

MARGARET KNIFFIN, A.B.

Executive Assistant

OFFICE OF ADMISSIONS

HELEN M. MCCANN, A.B.

Director

MARGARET DYKES DAYTON, M.A.

Associate Director

ANNE GREER, A.B.

Assistant Director

OFFICE OF THE ASSOCIATE ALUMNAE

To be appointed

Executive Secretary

OFFICE OF BUILDINGS AND GROUNDS

JOHN G. KIESSLING

Director

MARY BANE

Manager of Purchasing

MARGARET V. O'SHEA

Supervisor of Building Services

OFFICE OF THE BURSAR

FRANCES A. BARRY, M.S.

Bursar

OFFICERS OF ADMINISTRATION

OFFICE OF COLLEGE ACTIVITIES

ELIZABETH Y. MEYERS, M.A.	Director
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OFFICE OF THE DEAN OF THE FACULTY

LEMOINE CALLENDER, M.S.	Assistant to the Dean
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DEVELOPMENT OFFICE

BARBARA V. HERTZ, A.B.	Director
ELEANOR MINTZ, A.B.	Director, Barnard Fund

FINANCIAL AID

VIRGINIA SHAW, A.B.	Director
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FOOD SERVICES

ELEANOR R. SMITH, B.S.	Director
AUDREY BELL	Administrative Assistant

HEALTH SERVICE

MARJORY J. NELSON, M.D.	College Physician
LEONE COTTRELL, M.D.	Assistant College Physician
ZIRA DE FRIES, M.D.	Consulting Psychiatrist
HELEN STEIN, M.D.	Consulting Psychiatrist
LILO R. GROTHE, Ph.D.	Psychiatric Counselor
DENISE SAKS, M.D.	Psychiatric Counselor
LELA ANDERSON, R.N.	Nurse
BEATRICE G. TUCKER, R.N.	Nurse
CHARLES L. GILBERT, M.D.	University Medical Officer

LIBRARY

ROBERT B. PALMER, M.A., M.S.	Librarian
NATALIE SONEVYTSKY, M.S.	Reference Librarian
EDNA G. LAW, M.A., M.S.	Circulation Librarian
PATRICIA K. BALLOU, A.B., B.S.	Assistant Reference Librarian
MARY J. KELLY, M.S.	Order Librarian
LYNNE BRODY, M.S.	Reserve and Assistant Reference Librarian

BARNARD COLLEGE

OFFICE SERVICES

WINIFRED PRICE

Director

OFFICE OF PLACEMENT AND CAREER PLANNING

JANE A. SCHWARTZ, A.B.

Director

To be appointed

Assistant Director

RUTH P. BAKER, B.S.

Administrative Assistant

PUBLIC RELATIONS OFFICE

SARAH W. JOHNSON, M.A.

Director

DIANA C. WALSH, A.B.

Manager of Special Events

OFFICE OF THE REGISTRAR

HELEN LAW, A.B.

Registrar and
Secretary to the Faculty

DORIS CAMPBELL, A.B.

Assistant Registrar

OFFICE OF RESIDENCE

BLANCHE E. LAWTON, M.A.

Director

OFFICE OF THE TREASURER AND CONTROLLER

HELEN VANIDES

Executive Assistant

III. An Introduction to the College

BARNARD'S HISTORY

Barnard College was among the pioneers in the crusade, waged so ardently in the late nineteenth century, to make higher education available to young women. The history of its achievement is an integral part of the history of Columbia University.

The University had its origin in the royal charter granted by George II in 1754 to the Governors of the College of the Province of New York, creating them a Body Corporate to erect and maintain King's College "for the Instruction and Education of Youth in the Learned Languages and Liberal Arts and Sciences." The Revolutionary War interrupted its active work when its buildings were requisitioned by the Continental Armies, but in 1784 it was reopened as Columbia College. In 1896 it was designated a university, and in 1912 its title was legally changed to Columbia University in the City of New York.

Barnard College had its inception in an idea proposed in 1879 to the Trustees of Columbia by its tenth president, Frederick A. P. Barnard. It was his conviction that "in the interest of society the mental culture of women should be not inferior in character to that of men," and that young women should, therefore, be admitted to Columbia College. This thought which "failed to attract the serious attention of the Trustees," was, nevertheless, rigorously developed by President Barnard, and in 1883 a petition signed by over a thousand citizens of New York culminated in the inauguration of the "Collegiate Course for Women." Women who passed "a very strict entrance examination" were authorized to follow a prescribed course, but were left "entirely free as to where or how to carry on [their] studies, whether in some school, private or public, or at home, or under the auspices or direction of any association interested in [their] welfare and advancement. . . . Suitable academic honors and distinctions" were awarded to those who on examination were found to have pursued such courses with success. This system was destined to please no one, neither the young women whose search for instruction was made so difficult, nor Columbia College whose degree could thus be conferred on the strength of examinations only. Six years later when Certain Friends of the Higher Education of Women presented still another proposal to Columbia's Trustees, cooperation was obtained for the establishment of an affiliated college for women. A provisional charter was granted by the State of New York, promise of funds for the first four years was secured, and its name, in honor of its most prophetic and persistent advocate, was chosen.

In October, 1889, the first class of Barnard College met in a rented brown-stone house at 343 Madison Avenue with fourteen students enrolled in the School of Arts and twenty-two students in science, who, lacking the entrance requirements in Greek, were known as "specials." Six members of Columbia's staff gave instruction in prescribed subjects: English, French or German, Greek, Latin, and mathematics. A fellow of the University of Pennsylvania, Dr. Emily Gregory, volunteered her services as botanist, and Columbia soon sanctioned this role by appointing her its first woman lecturer.

BARNARD COLLEGE

Nine years later Barnard moved to its present site on Morningside Heights, and in 1900 it was incorporated in the educational system of Columbia University with provisions which at that time were unique among women's colleges: it was to be governed by its own Trustees, Faculty, and Dean; it was responsible for its own endowment and plant; it shared the instruction, the library, and the degrees of a university.

BARNARD TODAY

Barnard today presents rewarding contrast to the pioneer days. The teaching staff of six has grown to almost 200 men and women, some of them members of the University Faculties and some coming to the classrooms from the world of literature, the theater, and the arts. From the original fourteen matriculated students, enrollment has increased to 1,928; since 1893 Columbia has awarded its degree to 14,961 Barnard students. Pledges to support the College for its first four years have expanded to current endowment funds of \$16,459,000.

THE CURRICULUM

Within the University Barnard's corporate identity is maintained as an independent college for women. The curriculum offers the undergraduate opportunity to cultivate the liberal arts and sciences, to explore her cultural heritage, to discover and develop her capacity for intellectual adventure, and to establish habits of thought whereby she may utilize her knowledge in all facets of her future life.

Specific requirements for the degree are designed to give some comprehension of the roots of our civilization and an awareness of the diverse areas of human thought and their interrelationship: courses in the humanities enlarge the student's contact with literature and such fields as art history, music, philosophy and religion; acquaintance with the ideas and methods of a laboratory science is considered essential for an informed person in the modern world; finally, competence is necessary in at least one foreign language, to serve as an instrument for understanding and evaluating the achievements of other nationalities and a basis for communication with peoples whose history and traditions may differ from our own. This composes the basic curriculum of each student. Assistance in planning her individual course of study is given by her class adviser, a member of the teaching staff who supervises the work of the freshman and sophomore years.

At the end of this period each student chooses her major field. During the junior and senior years her major adviser guides advanced study in the area of concentration and all other phases of the college work. A major is offered by every department; interdepartmental majors may be requested in interrelated fields.

Classes vary in size. Language classes are small as are other courses in which student participation is important. All introductory courses and classes taught primarily by the lecture method are divided into small groups for conference and discussion. Laboratory work in the sciences is conducted with a wide variety of modern laboratory equipment. There are opportunities for independent work and students may also be invited to participate in the research projects of members of the Faculty. Some undergraduate courses are held

AN INTRODUCTION TO THE COLLEGE

with Columbia College, and the departments of Greek and Latin, Italian, Mathematics, Music, Physics, and Religion are conducted jointly with the University. Graduate courses in the University are also open to qualified upperclassmen under certain conditions.

THE CAMPUS

The campus now occupies four acres of land adjacent to Columbia, between 116th and 120th Streets, and additional dormitories are nearby. Three residence halls, Brooks and Hewitt, and Helen Reid Hall, face an open quadrangle. A College apartment building on 116th Street was remodeled in 1964 and converted into suites for upperclassmen, and the adjacent 620 West 116th Street is partially occupied by students. The new Plimpton Hall on the eastern border of Columbia University accommodates additional students. Milbank Hall at the northern end of the campus contains administrative offices and classrooms, the laboratories of the natural sciences, a greenhouse and an animal house for the use of students of biology, penthouse studios and practice rooms for music, and the Minor Latham Playhouse, where drama students and dramatics groups may use the equipment of a modern theater. The French, German, and Spanish Departments in Milbank Hall have social and reading rooms furnished by friends of the College with valuable paintings, music records, and books. In Barnard Hall are the gymnasium, the swimming pool and dance studios, English seminar rooms and classrooms, a spacious social center known as the James Room, and the Annex with a lounge and snack bar and quarters for student organizations.

Adele Lehman Hall, a five-story building containing the Wollman Library and classrooms, was opened in the autumn of 1959. The library was designed to provide for an expanding collection of both book materials and services, thus making available opportunities for independent work in advanced courses. It has a growing record collection with ample listening facilities, as well as an audio-visual studio and control room for the recording of tapes and for the use of other audio-visual equipment. The print room offers facilities for the study of photographs and art reproductions. Carrels are provided for individual study, a seminar room for class use of library materials, small rooms for typing, and studies for informal student discussion. The open-shelf arrangement, occupying three and one-half floors, has a capacity of 150,000 volumes, and Barnard students have access also to the over 3,000,000 volumes in the University libraries. Offices and seminars of the social science departments and classrooms occupy the top floor. A thirty-booth language laboratory on the ground floor is utilized by all language departments and by students of English speech.

The Millicent McIntosh Center and the fourteen-story Helen Goodhart Altschul Hall will be completed in 1969.

STUDENT LIFE

Barnard's student population is cosmopolitan in nature. One third of the students have families within commuting distance; the others come from nearly

BARNARD COLLEGE

every state in the Union and some twenty-five foreign countries. All represent diversity in background and training; and mingling of economic, regional, and cultural strains finds expression in the life of the campus.

The Undergraduate Association, of which all students are members, sponsors extracurricular activities reflecting current interests: the college newspaper, the literary magazine, drama clubs, political and religious clubs, the pre-medical club, and clubs representing many departmental fields. Students from Barnard and Columbia plan together for the social program of the two colleges. Many activities, such as the University's Chorus and Orchestra and its radio station, invite membership from all undergraduates in the University, and a Citizenship Program enlists volunteers from both colleges for community service.

The freshman and sophomore festival, Greek Games, is presented in the spring. Themes from classical mythology are portrayed in original dance, music, and verse, and an athletic contest is climaxed by a chariot race in which class teams of four "horses" compete in exciting style.

In the College community the Undergraduate Association takes wide responsibility, and its members serve on all-college committees. All students are automatically under the jurisdiction of the Honor Code, administered by the Honor Board of the Association, whereby a high standard of honor in examinations and all other phases of college life is maintained. A Judicial Council comprising undergraduates and faculty members recommends disciplinary measures for non-academic offenses. Students are expected to behave at all times in a manner which will reflect favorably upon themselves and the College.

Religious organizations and activities, with headquarters on the Columbia campus in Earl Hall, are open to all students. The Thursday Noon Meeting at Barnard provides a weekly forum for discussion of contemporary religious and philosophical thought by faculty and guest speakers and students. The devotional life of the College and University is centered in St. Paul's Chapel, where weekday and Sunday services are held. Attendance is voluntary. Through the cooperation of the Chaplain and counselors of various faiths a unity of religious life is secured within the University, while within each faith individual traditions are maintained.

The Athletic Association sponsors many campus activities, such as tennis, basketball, water ballet, fencing, and modern dance. Intercollegiate Sports Days held throughout the year enable students to participate in athletic events with other colleges. In 1933 Holly House, twenty acres of wooded land in Westchester County, was purchased by the alumnae, providing an accessible site for recreation during country weekends.

NEW YORK IS BARNARD'S LABORATORY

Fifty years ago, Nicholas Murray Butler, one of Columbia's great presidents, observed, "New York is intensely cosmopolitan and contact with its life for a short time during the impressionableness of youth is in itself a liberal education." The city is an extension of the campus, utilized by every department to narrow the gap between learning and living. Barnard is a university college in an international city, and today the curriculum affirms and encourages precise and graphic use of its vast metropolitan laboratory.

IV. Admission

Since entering classes are limited in size, admission to Barnard College is on a selective basis. The Committee on Admissions endeavors to choose candidates who seem most receptive to the discipline and challenge of a liberal arts education. Each applicant is considered in the light of her past performance, the qualities of mind and spirit which insure her growth as an individual, and her ability to contribute to the growth of those with whom she will associate in college and throughout her adult life.

The College believes it is also desirable for the student body to represent a stimulating variety of schools, both public and independent, from all parts of the United States and from abroad.

Although an interview is not required, students who wish to meet with a member of the Admissions staff may request an interview at the College in the fall of their senior year, or in their junior year except during the period between March 1 and May 1. Whenever it is possible the College will arrange interviews with alumnae for those students who are unable to visit the campus.

ADMISSION TO THE FRESHMAN CLASS

Application for admission to the freshman class should be made before January 1 of the year of entrance. It is advisable, however, to apply by the end of the junior year or the fall of the senior year. Application forms may be obtained by writing to the Director of Admissions.

A nonrefundable fee of \$15 must accompany each application. Checks or money orders must be in U.S. funds drawn on a U.S. bank, and made payable to Barnard College.

Students are admitted to the freshman class in September. They must be at least fifteen years of age, and should present the following credentials:

- 1) Evidence of good character, which is obtained from confidential reports from the applicant's secondary school principal and teachers and, if possible, through a personal interview at the College.
- 2) Evidence of sound health, to be submitted as soon as the applicant has been accepted, on forms provided by the Office of Admissions.
- 3) Evidence of intellectual ability and achievement, which is reported by the secondary school to the College, and is also demonstrated by the required College Entrance Examination Board tests.

Candidates for admission must offer a college preparatory program from an approved secondary school or should have equivalent education representing a four-year course of study. Academic preparation for admission should be based on the requirements for the A.B., or liberal arts, degree. A recommended program would comprise four years of work in English; three years in mathematics; four years in a foreign language (ancient or modern);

BARNARD COLLEGE

one year in a science with laboratory; and one year in history. An introduction to a second foreign language is generally useful. The remainder of the program would include additional work in the aforementioned subjects with the possible addition of music and art.

The Committee on Admissions is willing to consider the applications of students whose preparation may vary from the usual pattern but whose records give evidence of genuine intellectual ability and interest.

Every candidate for admission to the freshman class is required to take the College Entrance Examination Board Scholastic Aptitude Test and three Scholastic Achievement Tests. The latter must be taken in (1) English composition, (2) a foreign language, and (3) history, science, or mathematics. The Scholastic Aptitude Test should be taken in November, December or January of the senior year in high school. Achievement Tests in continuing subjects (English, foreign languages, mathematics, etc.) should be taken in December or January of the senior year. Students are also urged to take the Language Listening Comprehension Examination. Achievement Tests in one-year subjects or those completed in the junior year may be taken in May of the junior year. If the Scholastic Aptitude Test is taken for guidance purposes in the junior year, the scores should be reported to the College.

EARLY DECISION PLAN

In order to alleviate some of the problems arising from multiple applications, Barnard, with the other members of the Seven College Conference, has agreed to take action in the fall of the senior year on the applications of well-qualified students who have made their choice of a college by that time. Students wishing to apply under this plan should signify their intention when they request application papers. They must be certified by their school as having filed only one application.

Single-choice candidates for Barnard admission should send their application to the Office of Admissions, Barnard College, New York, N.Y. 10027, before October 1 of the senior year. Applications must be accompanied by the \$15 application fee.

Late in November Barnard will send to single-choice applicants letters of admission or rejection, or, in doubtful cases, postponement of decision until the customary date in the spring. Each applicant will be considered on the basis of (1) the recommendation of her school principal or counselor, (2) her three-year record at school, and (3) the results of the required College Board Scholastic Aptitude Test and the three Scholastic Achievement Tests taken in her junior year in English composition, a foreign language, and history, science, or mathematics.

The successful candidate will be expected to complete her senior year satisfactorily and to submit a record of that year's work. She will not be asked to repeat any College Board examinations. She must agree to pay to Barnard in January a deposit of \$100, if she is to be a commuting student, and \$150 if she is to be a resident student, to hold her place in the freshman class.

ADMISSION

The candidate on whose application decision has been postponed will be given full and careful consideration in the spring. She will be asked to submit a record of her school work for the first half of her senior year, with the results of senior College Board Scholastic Aptitude and Achievement Tests as additional evidence.

Candidates on whose credentials favorable action is not taken may file applications at other colleges after receiving their notification from Barnard.

THE COLLEGE ENTRANCE EXAMINATION BOARD TESTS

The College Entrance Examination Board will administer the following series of tests in 1969-70:

Saturday, November 1, 1969 (Scholastic Aptitude Test only)	
Saturday, December 6, 1969	Saturday, May 2, 1970
Saturday, January 10, 1970	Saturday, July 11, 1970
Saturday, March 7, 1970	

Candidates should write directly to the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540, for the Bulletin of Information containing descriptions of the Scholastic Aptitude and Achievement Tests, directions for filing applications, and lists of examination centers. When requesting the application forms, candidates should state the month in which they wish to take the tests.

Residents of California, Oregon, Washington, Idaho, Montana, Wyoming, Utah, Colorado, Nevada, Arizona, New Mexico, Alaska, Hawaii, Australia, Mexico, and the Pacific Islands should write to the Pacific Coast Office of the Board, Box 1025, Berkeley, California 94701.

To facilitate the arrangements for the conduct of the tests, all applications should be filed as early as possible. The normal closing date for the receipt of applications in Princeton, New Jersey, or Berkeley, California, for candidates outside the United States, the Canal Zone, Canada, Mexico, and the West Indies is two months before the date of the examination; for all other candidates the closing date is four weeks before the date of the examination. A penalty fee of \$3.00 to accompany the application will be charged for applications received later than the normal closing date.

No applications received in Princeton or Berkeley later than two weeks before the examination date will be considered. Candidates may not register for the tests at the examination centers. Each application should be accompanied by the appropriate examination fee:

Scholastic Aptitude Test alone	\$5.50
One, two, or three Achievement Tests	8.50

The Board will report the results of the tests to the institutions indicated on the candidates' applications. The colleges, in turn, will notify the candidates of the action taken on their applications for admission. Candidates will not receive reports of their tests from the Board.

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ADMISSION WITH ADVANCED PLACEMENT

Students who have completed advanced work in secondary school and who present satisfactory scores on the Advanced Placement Tests of the College Entrance Examination Board may be placed in courses above the level of the freshman year, at the discretion of the departments concerned.

On recommendation of the Barnard departments concerned, students with scores of 4 or better on the College Entrance Examination Board Advanced Placement Tests may be given up to four semester courses of credit. A petition must be submitted to the Committee on Programs and Standing.

ADMISSION TO ADVANCED STANDING

Transfer students are admitted in September and in February. Candidates should present a strong record of not less than one year's work at an accredited college, or foreign university, or institution of equivalent grade. In general, credit is given for courses taken at another college which are similar in content to those offered at Barnard. (See also page 34.)

The student should submit her formal application and the following credentials: her secondary school record, a recommendation from her principal and her college dean or class adviser, a complete and official transcript of her college work and a copy of the college catalogue in which the courses she has taken are clearly marked, and the results of the College Entrance Examination Board tests. A candidate will be asked to take the College Entrance Examination Board Scholastic Aptitude Test if she has not already done so. No definite credit for junior college work can be assigned until the student has had an opportunity to establish a satisfactory record at Barnard.

In all cases, final action on admission of a transfer student depends upon the receipt of a statement of honorable dismissal, which is a certificate of good character from an authorized representative of her college, and the required health reports.

Application for admission to advanced standing should be submitted before May 15 for admission in September and before December 1 for admission in February. All credentials should be in the hands of the Committee on Admissions by September 15; otherwise, the student may be asked to postpone registration until after classes begin, thereby incurring an additional fee of \$15 for lateness.

Seniors who are degree candidates at other colleges may apply for permission to complete their requirements at Barnard. Each applicant must present satisfactory college records and letters of approval from her Dean and her major adviser, and agree to comply with all Barnard regulations concerning attendance and course examinations.

ADMISSION OF FOREIGN STUDENTS

The College is interested in the applications of qualified foreign students. Candidates are expected to take the Scholastic Aptitude Test given by the College Entrance Examination Board, if they can arrange to do so. (This test

ADMISSION

examines the student's ability to understand word relationships and to comprehend what is read, and the ability to understand and solve mathematical problems.) Freshman candidates should also present the Achievement examination results. Requests for an examination center overseas should reach the Board, Box 592, Princeton, New Jersey 08540, two months prior to the dates listed on the previous pages.

Knowledge of the English language is essential for admission. It is recommended that applicants take the TOEFL, Test of English as a Foreign Language. Information about registration should be obtained by writing to the TOEFL Program, Educational Testing Service, Princeton, New Jersey 08540. If the results of this examination cannot be presented, students whose native language is not English are required to take the American University Language Center Test. Arrangements for it should be made through the United States Consulate.

During the week of registration (September or February) all foreign students must take English placement tests in writing, aural comprehension, and speech. Failure to pass these tests will necessitate remedial courses in English at Columbia University, either without academic credit or with limited credit, depending on the level of the course and the grade obtained. No credit is assigned for other academic courses until the remedial work is successfully completed.

Limited financial aid is granted to qualified applicants. Admitted students should direct an inquiry to the nearest American Embassy concerning the possibility of securing a Fulbright travel grant. Employment during the first year here is not permitted. Official approval must be obtained from the Immigration and Naturalization Service for paid work after the first year.

Definite credit for study at foreign institutions is not assigned until a full year of satisfactory work has been completed at Barnard. It is hoped that the foreign student will return to her home country and utilize her education after completion of studies in the United States.

For information concerning the Medical Expense Policy which is obligatory for foreign students whose homes are outside the United States, please see page 177.

Candidates are urged to communicate with the Director of Admissions well in advance of the date they wish to enter, so that the College may be of assistance to them in making their plans.

READMISSION

A student who has withdrawn from the College, or who has been on leave of absence, is not automatically readmitted. She should make application for readmission to the Director of Admissions. A nonrefundable fee of \$15 must accompany the application of any student who has not been granted a leave of absence by the Dean of Studies. Completed applications are due by December 1 for the Spring Term, and by March 15 for the Autumn Term. All required credentials (e.g., medical reports, transcripts, recommendations) as well as the application must be submitted by these dates.

V. Degree Requirements

ACADEMIC REQUIREMENTS FOR THE A.B. DEGREE

Requirements for the Bachelor of Arts degree serve as a framework for the acquisition of knowledge of the various fields of human thought. They have been planned to secure for the student a sound foundation in the liberal arts and sciences on which to base intensive work in the sphere of her special interest. These requirements call for the completion of 32 courses and include the following:

I. BASIC.

- 1) English A1. (Foreign students please refer to page 30.)
- 2) One science (two semesters), with laboratory.
- 3) Foreign language. Competence in a modern foreign language, or in Greek or Latin. This requirement may be fulfilled either by passing an examination with a sufficiently high score, or by satisfactory completion of a designated course. (See the statement under the appropriate language department for further details.)

II. GENERAL.

Completion of six semester courses outside the major department, selected from the following six categories (no more than two courses in any single category may satisfy the requirement):

- 1) Art history; music
- 2) Literature in the language in which it was originally written
- 3) Philosophy; religion
- 4) History
- 5) Anthropology; economics; geography; government; sociology
- 6) Mathematics

III. MAJOR.

A major field is to be selected before the end of the sophomore year, consisting of not less than 8 courses of prescribed work. Each department requires, as specified, either a senior thesis or a major examination or an equivalent demonstration of achievement in the discipline. A major may be chosen in any one field, or in such combinations as are approved by the Committee on Programs and Academic Standing.

IV. PHYSICAL EDUCATION.

Completion of six semesters required for students admitted as freshmen; four semesters for students admitted as sophomores; two semesters for students admitted as juniors.

All requirements must be completed within six years of the student's matriculation as a freshman at Barnard or elsewhere.

DEGREE REQUIREMENTS

SATISFACTION OF REQUIREMENTS BY EXAMINATION

At the discretion of the department involved, a student may take special examinations which, if successfully passed, offer exemption from basic, general, and major requirements. Special examinations may also be taken to demonstrate preparation for admission to advanced courses. Further details concerning such examinations are available in the Office of the Registrar and the departmental offices. The purpose of these examinations is to allow the student a wider intellectual experience than would otherwise be possible during the four-year College course.

SENIOR SCHOLAR PROGRAM

The Senior Scholar Program allows especially qualified students to undertake a single project, with exemptions from all course and major requirements, in their senior year. The program is intended to meet the needs of those few students who come to the senior year with a record of unusual accomplishment in a specific area of scholarship, or in the practicing arts. A student with such qualifications, who has a clear and well-organized proposal and has found a faculty adviser to direct her work, should apply to the department concerned by mid-semester of the second term of the junior year. At the conclusion of the junior year, the student should have completed all basic and general requirements for the degree. The Senior Scholar Program is not primarily for the student who intends to become a candidate for an advanced degree because the year of independent work may preempt regular academic preparation for such a degree.

RESIDENCE

Students are expected to remain in residence for four years. Requests for acceleration will be granted sparingly and only for reasons of importance. Such requests must be submitted no later than October 1 of the junior year. Normally, only 8 courses per year will count for credit, but students may elect to take 5 courses in any term. All count equally in determining average. Permission to complete the work for the degree while registering *in absentia* may be granted under certain conditions on application to the Committee on Programs and Academic Standing.

GRADING SYSTEM

Academic standing and eligibility for graduation are determined by the quantity and quality of the student's work. Quantity is estimated by the number of courses completed. Quality of work is indicated by the following grades: A or A—, excellent; B+, B, B—, good; C+, C, C—, fair; D, poor; F, failure, and P, passed without a specific grade. Work of unusual merit in the major field is awarded the grade Passed with Distinction.

A course is marked Incomplete (Inc.) if the student has filed the instructor's written permission for the postponement of required work with the Registrar; Absent (Abs.) means absent from the final examination; Deferred (Def.) means the grade has been deferred because of illness during the examination;

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the entry Y-C signifies that the grade on completion of the second term will apply to the first term as well; WD/F signifies withdrawal from a course without formal notification.

Students may elect a pass-fail grade in courses not necessary to satisfy the requirement in the major, providing twenty-eight of the thirty-two courses required for graduation are taken for letter grade credit.

In computing averages, each course with a mark of A = 4; B = 3; C = 2; D = 1; F = 0. For every plus or minus unit an adjustment of +0.3 or -0.3 is made. In order to be recommended for the degree a student must maintain a cumulative average of 2.00 (C) for her entire course and for her senior year specifically. At the end of each term all records are examined. Normally only those students whose cumulative average is 2.00 or above are permitted to remain in college. The continuance in college of students whose work falls below this average depends upon promise of future development and is determined by the Committee on Programs and Academic Standing.

Work of D grade is not counted in the major field, although it is included in the average for the major.

REQUIREMENTS FOR TRANSFER STUDENTS

Before registration the transfer student receives an estimate of the credit she may expect for work she has done at her previous college. She plans her program with her adviser using the estimate as a guide to the required work to be completed.

All transfer students (except foreign students) are considered to have satisfied the requirement of English A1. Those who subsequently appear to have deficiencies in English will be advised to take further work.

Transfer students are required to take a language placement test before registration and are assigned to the course which the results of the test indicate they are prepared to take. A high score on the test will give exemption from the language requirement. Should the student be placed in a language course lower than one already passed at her former college she will lose credit for any work that must be repeated. Courses in literature may be counted as elective credit and may be used to satisfy the general requirement under certain conditions, even though the student may be required to take additional work in language to complete the language requirement.

A maximum of 8 courses toward the Barnard degree is allowed for one year's work elsewhere. Sixteen of the courses to be counted toward the degree must be taken at Barnard, including a minimum of 6 courses in the major field.

According to current faculty legislation, work done in summer session may not be counted for credit toward the degree, except to make up a deficiency in work taken during the regular term (a course dropped or failed) or when permission has been granted by the Committee on Programs and Academic Standing (by petition) to accelerate and graduate in fewer than eight semesters. Summer work may be used, with permission of the appropriate department, in fulfillment of a basic or general requirement, even when credit is not assigned.

VI. General Information

REGISTRATION

Class advisers for the freshman and sophomore years and major advisers for upperclassmen are appointed from the teaching staff and are prepared to give information and advice. For the year 1969-70 the class advisers are:

Advisers to the Class of 1972	MRS. LYDIA KESICH MRS. LOUISE G. STABENAU
Advisers to the Class of 1973	MRS. MIRELLA DE SERVODIDIO MRS. DOMNA STANTON

Registration for all students takes place in 306 Barnard Hall, as follows:

Autumn Term

Monday, September 22	All returning students whose permanent home address is within a fifty-mile radius of New York City.
Tuesday, September 23	All returning students whose permanent home address is outside a fifty-mile radius of New York City.
Wednesday, September 24	a.m. Freshmen p.m. Transfers and readmitted students.

Spring Term

Monday, February 2	a.m. Freshmen p.m. Sophomores
Tuesday, February 3	a.m. Juniors p.m. Seniors, February transfer and re-admitted students.

Registration is not complete and classes cannot be attended until all fees, including those for residence, are paid. A fee of \$15 is charged for failure to register at the scheduled time. (See also Payment of Fees, page 174.)

No student will be permitted to register after Friday, October 3, in the Autumn Term and Friday, February 13, in the Spring Term.

No student may be registered simultaneously in any other school or college without the consent of the President of the College.

ACADEMIC DISCIPLINE

The continuance of a student upon the rolls of the College, the receipt of academic credit, graduation, and the conferring of a degree or certificate are subject to the disciplinary powers of the College. Any registration may be cancelled at such time and upon such grounds as the College shall in its sole discretion determine.

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ATTENDANCE

All students are expected to attend classes regularly. Students who absent themselves from classes must expect the quality of their work to be affected, with consequent detriment to their academic standing. Frequent or prolonged absences from the College without a compelling reason such as illness will cause a student to forfeit the right to make up work or take final examinations.

All absences due to illness must be reported on forms available in the Office of the College Physician. Illness is considered an excuse for absence only if the student's statement is filed immediately upon her return to college.

Barnard is a nondenominational college. Students who are prevented by conscientious scruples from complying with academic requirements on days set apart for religious observance should discuss this problem with their religious counselor.

WITHDRAWAL

A student not subject to discipline for infraction of College rules may withdraw from the College with an honorable discharge. Notice of intention to withdraw must be given in writing on forms obtained from the Office of the Dean of Studies. If the student is under twenty-one the forms must be signed by a parent or guardian. Failure to submit the proper notification on the part of a student who withdraws while College is in session may result in a report of WD/F for the term's work.

LEAVES OF ABSENCE

Requests for leaves of absence should be addressed to the Dean of Studies on forms to be obtained from her office. A student in good standing may be granted a leave of absence for one term or two consecutive terms only, for personal reasons, e.g., health, marriage, financial necessity, or for study abroad. Completed application for leave of absence must be received prior to the term(s) to which it applies: by July 1 for the Autumn Term; by January 15 for the Spring Term.

CLASSIFICATION OF STUDENTS

Students are classified as follows:

Freshmen:	those who have completed fewer than 6 courses
Sophomores:	those who have completed 6 courses
Juniors:	those who have completed 14 courses
Seniors:	those who have completed 24 courses
Unclassified:	those who have not yet been assigned definite credit on transfer
Nonmatriculated:	those who are not candidates for the degree

No matriculated student may change her status to that of nonmatriculated student.

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CHANGE OF PROGRAM

Students may change the programs for which they have registered through Friday, October 3, Autumn Term, and Friday, February 13, Spring Term. After that date, changes of program are subject to the following regulations:

Section Changes. Sections may not be changed except at the written request of the instructor.

Adding Courses. No course may be added for any reason.

Dropping Courses. A course may be dropped with the written approval of the class adviser (for freshmen and sophomores), the major adviser (for juniors and seniors), or the College Physician. After a fixed date (Friday, December 12, Autumn Term; Friday, April 10, Spring Term), no course may be dropped except with the approval of the Dean of Studies, and then only for reasons of serious personal emergency.

Audited Courses. No change from a noncredit to a credit basis may be made under any circumstances after the final date for adding a course. Permission of the instructor is required to audit a Barnard course. For Columbia courses, forms must be obtained from the Registrar.

COLUMBIA UNIVERSITY COURSES

Under certain conditions courses in other divisions of the University may be elected when an equivalent course is not offered at Barnard.

Graduate Faculties: With the approval of the major adviser, graduate courses in the major field are open to qualified upperclassmen who need this work to achieve their specific objective. For graduate courses outside the major field, the student must also obtain the approval of the chairman of the department concerned, and of the Committee on Programs and Academic Standing if exemption from additional fees is desired.

Seniors with high academic standing may apply for permission to count up to 4 courses of graduate work in the major field toward the graduate degree.¹

Those who wish to register for graduate courses to count toward a higher degree must comply with the following conditions:

1. The approval of the chairman of the Barnard and Columbia departments, the Graduate Admissions Office, and the Committee on Programs and Academic Standing must be obtained in advance and filed in the Registrar's Office.
2. The student must be in her senior year.
3. The program for the term must not be in excess of 5 courses.
4. The courses for graduate credit must be over and above the 32 courses required for the A.B. degree.

¹ Financial aid is not applicable to fees for such work.

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Columbia College: Certain courses at Columbia College may be elected, in addition to those in this announcement. Those who wish to register for them must obtain written approvals on forms to be obtained in the Registrar's Office.

School of General Studies: Courses in the School of General Studies which are not listed in this announcement may be elected with the approval of the class or major adviser and the Committee on Programs and Academic Standing upon application to the Registrar's Office. They will be credited toward the degree if passed with a grade not lower than C. Fees for General Studies courses not listed in the Barnard announcement are paid for by the student herself over and above the Barnard tuition, with the following exceptions:

1. Courses which are essential to the major for which the approval of the major adviser and the Committee on Programs and Academic Standing is obtained.
2. Language courses not offered at Barnard, under special conditions to be reviewed by the Committee on Programs and Academic Standing.
3. Courses certified by the chairman of a department as essential to a program of work to be taken at Barnard in a particular field under the direction of the department.

Teachers College: Certain courses may be taken for credit by qualified seniors with the consent of the Dean of Studies and the Registrar of Teachers College. Except for seniors in the Barnard education program, fees for these courses are not included in the regular tuition, but are added to the Barnard bill.

SUMMER STUDY

A student will normally be expected to spend four years completing the work for the degree; however, with prior approval of acceleration by the Committee on Programs and Academic Standing or permission to make up a course dropped or failed during the term, up to 4 courses may be taken for credit in summer session. Summer study may also be used for the satisfaction of pre-requisites or for the fulfillment of requirements.

The entire summer program must be approved in advance in writing, first by the class or the major adviser, and secondly by the chairman of the appropriate Barnard department. Programs must be approved and submitted to the Registrar before the last day of the Spring Term. Official reports of grades must be filed with the Registrar not later than October 15. Grades of Absent or Incomplete will not be honored after that date.

Not more than two one-semester courses may be elected in any one summer session.

Courses of less than six weeks' duration are credited only in exceptional cases.

No course with a grade lower than C will be credited toward the degree.

Grades will not be included in the Barnard average.

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EXAMINATIONS

Examinations are scheduled at the end of each term. For the academic year 1969-70 they will be held January 19-29, inclusive, and May 18-28, inclusive.

Deferred examinations, given in September and March, are open only to those students whose work is satisfactory and who were absent from the regular examinations for reasons of illness or extreme family emergency. Exceptions to these conditions can be made only by ruling of the Committee on Programs and Academic Standing in individual cases.

Absence for reasons of health on the day of an examination should be reported to the Office of the College Physician.

Examinations missed in January are to be taken the following March or, in cases of prolonged illness, in September of the same year. Those missed in May are to be taken in September of the same year. If a student absents herself without a valid excuse from a final or deferred examination, she will receive a grade of zero for that examination. A fee of \$5, payable in advance, is charged for each deferred examination. A senior who has missed an examination at the end of her last term may apply for a special examination for which the fee is \$10, payable in advance.

Tentative examination plan

The following plan shows the pattern normally used in making up the examination schedule; it is necessarily subject to change. In the periods left open, groups 10 through 17 are arranged so as to avoid conflicts for Barnard students taking Columbia examinations scheduled at these times.

FIRST WEEK

A.M.	MON.	TUES.	WED.	THURS.	FRI.
Group		8	1	6	3
Class		TuTh 11	MWF 9	TuTh 9	MWF 11
Hour					
P.M.	MON.	TUES.	WED.	THURS.	FRI.
Group	5				
Class	MWF 2				
Hour					

SECOND WEEK

A.M.	MON.	TUES.	WED.	THURS.	FRI.
Group	2	7			
Class	MWF 10	TuTh 10			
Hour					
P.M.	MON.	TUES.	WED.	THURS.	FRI.
Group	4	9			
Class	MWF 1	TuTh 2			
Hour					

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QUIZZES

Instructors are not required to give make-ups to those absent from previously announced quizzes. In case an instructor is willing to give a make-up quiz, he is authorized to do so only if the student has submitted a medical certificate of illness approved by the College Physician, or evidence of other extenuating circumstances acceptable to the instructor.

DEGREES

Students are recommended by the Faculty of Barnard College to the Trustees of Columbia University for the degree of Bachelor of Arts. Degrees are granted in June, October, and February. A statement of intention to complete the work for the degree on any one of these dates must be filed with the Registrar at the announced time. (See College Calendar pages 7 and 8.)

HONORS

The Faculty confers honors upon students who complete work for the degree with distinction (cum laude, 3.25), with high distinction (magna cum laude, 3.50), and with highest distinction (summa cum laude, 3.75). Students whose records include work done at another institution will be eligible for honors if both the over-all and the Barnard average meet this requirement. Departmental honors are awarded to graduates who have done distinguished work in their major fields.

DEAN'S LIST

A Dean's List, which contains the names of students who deserve special mention for superior scholarship, is compiled at the end of each academic year. A program of not less than 3 courses each term and an average of 3.40 for the year are required. Announcement of the list is made the following October.

PHI BETA KAPPA

The Barnard section of the Columbia University chapter of Phi Beta Kappa was founded in 1901. Election to the national honor society is a recognition of scholarship, and Barnard students of exceptionally high standing are eligible. Questions concerning Phi Beta Kappa should be referred to the Office of the Dean of Faculty.

THE HONOR SYSTEM

An integral and pervasive aspect of academic life at Barnard College is the school's Honor System, instituted in 1912. Under it, a student is expected to maintain responsibility for her own conduct and to show consideration for other members of the community in academic matters. Thus examinations

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are unproctored and the library employs no guarding system. In addition, this code of responsibility for oneself and to the community applies to such areas as the signing of class attendance sheets and the preparation of assignments. Administration of the Honor Code and any infractions of it which may occur are dealt with by the Honor Board; ultimately, however, the success of the Honor System depends on the integrity of each individual Barnard student.

HEALTH

The College Physician is responsible for the health of the college community. She is assisted by one part-time physician, two consulting psychiatrists, two psychiatric counselors, and two nurses. Medical examinations at regular intervals are obligatory: December 15 is the final date for seniors for the completion of their examination; May 15 for freshmen. Students will not be permitted to register for the succeeding term until they have had this examination.

All students, residents, nonresidents, and commuters, must immediately report any illness, however minor, to the Medical Office. If resident students wish to have someone other than the College Physician care for them, their parents must address a request to the College Physician and send her the name and address of the doctor before registration.

HOUSING

Traditionally, Barnard has attracted students from all over the world as well as from its own community, New York City, and its suburbs. At present the College has academic facilities for 1,880 students, of whom approximately 1,050 can be housed in the campus residence halls and the Barnard cooperative apartment residences adjacent to the campus. Additional rooms are assigned by the College in other residences near the campus.

No student may register for classes until her housing arrangements have been completed. The Director of Residence must know before academic registration each term where every student is living and must have any permission forms required of the student complete and on file. For students over 21, resident students, and for commuters living with their parents or legal guardians, and for married students living at the address to which their College bills are sent, no action is necessary beyond correct recording of their addresses at the time of academic registration. Any student who wishes to change her address at any time after her first registration for a given academic term (even when returning to her legal home) must file with the Director of Residence her new address and necessary permission.

HOUSING CLASSIFICATIONS

Students are classified as residents, nonresidents, or commuters when they enter Barnard. Their status may change: 1. if the legal residence changes (i.e., the residence of the parent or legal guardian for students under 21); 2. in case

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of nonresidents, if they are assigned a room in one of the residences owned and operated by the College; 3. in case of residents, if they move off campus.

Resident

A resident is a student whose legal home is outside the commuting area (1 hour by public transportation from the College each way) and who is assigned a room by the Director of Residence in one of the residences owned and operated by the College.

Nonresident

A nonresident is a student whose legal home is outside the commuting area (1 hour by public transportation from the College each way) who is not assigned space in one of the residences owned and operated by the College. The parent or legal guardian must submit a written request for off-campus housing, Fairholm, or Hotel Paris to the Director of Residence by September 1 for the Fall Term and by January 15 for the Spring Term. A Nonresident Housing Permission Card is then forwarded to the parent or guardian to be filled out, signed and returned. Permission is official when the card is on file at the College. When the student accepts a room in college housing, her housing classification changes to that of resident.

To arrange for off-campus housing, the parent or legal guardian must sign a Housing Permission Card stating that he or she takes full responsibility for the student's health, safety and finances. Permission is official when the card is on file at the College. The College strongly recommends that two or more students live together. Should a student return to her legal home, she must notify the Director of Residence.

Commuter

A commuter is a student whose legal home is within 1 hour each way by public transportation from the College.

Commuters are eligible for College-assigned housing when space is available. They are not reclassified as residents. Priority is based on commuting difficulty and distance and on date of application. If a commuter is given special permission for off-campus housing, her name will be removed from the waiting list for College-assigned rooms unless she specifically requests that it should remain.

HOUSING FACILITIES

College-Owned and Operated Residences

1. BROOKS, HEWITT and REID HALLS, supervised dormitories at 3001 Broadway, are operated as one complex with space for approximately 510 students from all classes. Rooms are singles and doubles. Freshmen are usually assigned to double rooms. All students living in these halls are required to subscribe to the College food plan. Assignments are made by the Director of

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Residence according to the following priority: incoming resident freshmen and resident upperclassmen; resident students returning from leaves of absence; non-residents who have permission to change their status to residence; and commuters who by special permission may live on a temporary, semester basis in the dormitories without a change of housing status. Rooms are \$600 a year, board \$550 a year.

2. 616 West 116th Street, an apartment-style supervised residence directly across the street from the other halls, provides housing for 207 upperclassmen in suites of single and double rooms accommodating five to six girls. Each suite has a kitchen in which students may prepare their own meals. If they wish, they may subscribe to the College food plan and take meals in the Hewitt dining room at \$550 a year. Rooms are \$660 a year.

3. PLIMPTON HALL, an apartment-style supervised residence on Amsterdam Avenue and West 121st Street, a short walk from the main campus, provides housing for 280 upperclassmen in suites of 5 single rooms. Each suite has a kitchen and bath. Rooms are \$700 per year, and subscription to the food plan is optional.

College-Reserved Space Assigned by the Director of Residence

1. 620 West 116th Street. Barnard College has limited space available in this recently purchased apartment building. There is no supervision. Seniors have first priority for this space. Rooms are \$660 per year.

2. THE FAIRHOLM, 503 West 121st Street, is a residence owned and operated by Teachers College of Columbia University. Students have their own keys; no supervision is provided. Assignments are made by the College to commuters and nonresidents who have parental permission. Barnard contracts for single rooms in housekeeping suites. Prices range from \$440 to \$572 per year.

3. HOTEL PARIS, West End Avenue at 97th Street is convenient to buses and subway and is about 10 minutes away from the main campus. Barnard students may contract for rooms, each with private bath. Graduate assistants are available to students to answer questions and in case of emergency. The cost is \$600 per year.

Off-Campus Housing Available to Students

The Barnard College Housing Office maintains listings of vacant off-campus apartments and rooms. The College, however, can take no responsibility for the recommendation of these facilities, since they are not inspected by College officials; nor are their owners necessarily known to the College.

FINANCIAL AID FOR ROOM AND BOARD

Barnard students whose academic records and financial situation make them eligible for financial aid from the College for living expenses will have the cost of board and room considered in the award when they are residents in

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Brooks, Hewitt, Reid, in 616 West 116th Street, or in 620 West 116th Street, and on the College meal plan. Students in 616, 620 or Plimpton Hall not on the College meal plan as well as students assigned to the Fairholm or Paris Hotel and who are eligible for financial aid will have their need determined by the room rent and the cost of raw food.

MARRIED STUDENTS

Students who plan to marry during the academic year and continue in college are asked to notify the Dean of Studies. Married students, as a rule, will not be allowed to remain in the college residences. They will be subject to the financial obligations which pertain to any student who withdraws from the residence halls or from the College during the term.

THE OFFICE OF PLACEMENT AND CAREER PLANNING

The Office of Placement and Career Planning, maintained by the College as a service to alumnae and students, offers assistance in planning for and obtaining full- and part-time positions. Through personal interviews and an analysis of interests and experience, its staff helps to guide students and alumnae into occupations which utilize their capabilities to the fullest extent.

The Office, which is open throughout the year, keeps in close touch with the needs of employers through the hundreds of jobs referred to the College, through professional contacts of faculty and alumnae, and visits to schools and organizations in business and professional fields made by members of the placement staff. In cooperation with the Advisory Vocational Committee of the Associate Alumnae, a program of vocational conferences and meetings is offered on the campus, giving students an opportunity to discuss specific fields of work with experts.

The Office of Placement and Career Planning helps undergraduates to find part-time jobs both on and off the Barnard campus. Typical jobs include baby-sitting, tutoring, sales and clerical work. Freshmen are discouraged from undertaking employment, since it is difficult at first to estimate the amount of time that can be safely spared from academic work. After the first year, a student with good health and sound academic standing should be able to carry part-time employment amounting to not more than ten or twelve hours per week. Student earnings during the college year average \$400.

Assistance in finding a summer job can be obtained through the Office of Placement and Career Planning. Approximately 75 per cent of the Barnard students work during the summer and their earnings average about \$600.

VII. Courses of Instruction

The College reserves the right to withdraw or modify any course or to change the instructors as may be necessary.

Course descriptions will be found in the following pages. Fuller information can be obtained from the chairmen of the departments at registration periods and during the academic year.

Room assignments are printed on separate sheets and distributed during registration.

Autumn Term courses are marked by odd numbers, Spring Term courses by even numbers, year courses by consecutive odd and even numbers. An even number followed by **x** indicates a course given in the Autumn Term. An odd number followed by suffix **y** indicates a course given in the Spring Term.

Indivisible courses which run throughout the year are marked with a hyphen between the numerals (History 1-2). No credit is given for work in an indivisible course dropped at midyear without the written consent of the instructor and the departmental chairman and the approval of the Committee on Programs and Academic Standing.

Divisible courses which run throughout the year are marked with a comma between the numerals (English 1, 2). The first half of such courses may be taken separately. Admission to the second half without completion of the first half is granted only if the written permission of the instructor is obtained.

Courses are arranged in examination groups to avoid conflicts on the examination schedule. The groups are indicated by boldface numerals following the course title (English Composition **[0]**). Group **0** includes courses which ordinarily do not have set examinations. No student may elect two courses in the same examination group, other than Group **0**, without a written statement from one or the other instructor that a conflict examination will be given. This statement must be filed by the student in the Registrar's Office. A complete list of courses by examination groups is given on pages 188-190.

The following alphabetical prefixes designate the division of the University for whose students the course is primarily offered or indicate joint courses.

- C — Columbia College
- F — School of General Studies
- G — Graduate Faculties
- R — Program in the Arts
- V — Joint undergraduate course with Columbia College
- W — Other inter-faculty course

The level of the course in general is indicated as follows:

- 1000-3999 Undergraduate
- 4000-5999 Graduate, open to qualified undergraduates
- 6000-8999 Graduate, normally not open to undergraduates

The symbol **x** follows the number of a course given in the Autumn Term; the symbol **y** follows the number of a Spring Term course.

INTERDEPARTMENTAL OFFERINGS

I. FOREIGN AREA STUDIES

Officer in charge for 1969-70, PROFESSOR MESKILL.

The purpose of Foreign Area Studies is to provide an introduction to the study of some one foreign region or country of the world. The study is divided into three elements: language, a scholarly discipline, and a diversified approach to a region. Accordingly, a student who majors in Foreign Area Studies plans her program in four aspects:

1. Command of at least one appropriate foreign language. The competence expected varies according to the language; for specific requirements consult the officer in charge. In addition to the language courses offered at Barnard, courses in other languages are available at Columbia University.
2. Acquaintance with the basic knowledge and methods of an academic department, such as history or literature, not necessarily with reference to a specific region. The major adviser helps in the choice of courses.
3. Courses on a region or country viewed through both the social sciences and the humanities, including the discipline chosen in the second aspect of the major. Courses are chosen in consultation with the major adviser.
4. A senior seminar or equivalent work under the direction of the committee.

Foreign Area Studies majors are available in the following regions: England (see special program in British Civilization, page 47); Western Europe, with special reference to some one country; Russia; Asia, with special reference to certain regions (see Oriental Studies, page 135); and Latin America.

The major examination is in two parts: one examining knowledge of the chosen area in general and the other knowledge of the area in terms of the chosen discipline. Specially qualified students may be invited to write a senior thesis instead of the second part of the major examination.

A major in Foreign Area Studies is open to a limited number of qualified students whose applications are approved by the committee in charge. Freshmen and sophomores anticipating such a major should consult their class advisers and the officer in charge of Foreign Area Studies as early as possible. Before the junior year it is advisable for such students to complete as many of the college requirements as possible and to begin study of an appropriate foreign language.

II. AMERICAN STUDIES

This program is supervised by the Committee on American Studies:

BASIL RAUCH, Professor of History

ANNETTE K. BAXTER, Associate Professor of History, Chairman

BARBARA NOVAK, Associate Professor of Art History

CHRISTINE ROYER, Instructor in English

INTERDEPARTMENTAL OFFERINGS

The purpose of the program is to develop understanding of American civilization considered as a whole. The results of specialized study in all fields of learning dealing with American subject matter are assembled for the work of the senior seminar.

A major in American Studies: In order to acquire a broad understanding of American civilization and acquaintance with various methods of studying it, a student who majors in American Studies must take a program, planned in consultation with her major adviser, which includes the following:

- (a) Two courses selected from among ancient, medieval, or European history in any combination.
- (b) Two courses in American history.
- (c) Two courses in social science dealing primarily or partly with American subject matter.
- (d) Two courses in humanities dealing primarily or partly with American subject matter.
- (e) In the junior year American Studies 1-2, and in the senior year American Studies 3-4.

A research essay to be prepared in the senior seminar is required in lieu of the major examination.

1-2. Junior Readings.

[0]

Students will read selected classics in American Studies; brief written reports will be submitted for discussion. The aim of the course is to prepare the student to read, discuss, and write critically on interdisciplinary works. PROFESSOR BAXTER. Biweekly meetings. Th 3:35-5:15.

3-4. Senior Seminar.

[0]

Individual research on diverse aspects of American civilization, in consultation with the instructors, and presentation of results in the form of the senior essay. PROFESSORS RAUCH AND BAXTER. W 4:10-6 and frequent conferences.

III. BRITISH CIVILIZATION

This program is supervised by the Committee on British Civilization:
STEPHEN E. KOSS, Associate Professor of History
DAVID A. ROBERTSON, JR., Professor of English, Chairman
ELEANOR ROSENBERG, Professor of English
CHILTON WILLIAMSON, Professor of History
GEORGE WOODBRIDGE, Associate Professor of History

Open to students who are interested in an interdisciplinary approach to learning within a broad general area. Particularly emphasizes historical and literary traditions of British Civilization, but is comprehensive enough to include specialized interests in the fields of imperial and commonwealth studies.

A student who wishes to major in British Civilization must obtain the approval of the chairman of the committee before March 1 of the

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sophomore year. By this time the applicant should have completed or be in the process of completing History 21, 22. She should then plan, in consultation with her adviser, a program of study which will include:

- (a) The following required courses: History 21, 22; History G6327x-G6328x; Government 2; and a senior seminar in history or English.
- (b) Four additional half-year courses within the general area of British Civilization, of which two must be in English literature.

Senior requirement: A thesis, the length and standards of which will be set by the committee. Junior majors should consult with chairman during the Spring Term about placement in pertinent senior seminars.

IV. CONSERVATION OF NATURAL RESOURCES

This program is organized and administered by a committee of members of the Departments of Biology and Geology-Geography.

LEONARD ZOBLER, Professor of Geography, Chairman

DONALD D. RITCHIE, Professor of Biology

PATRICIA L. DUDLEY, Associate Professor of Biology

DAVID W. EHRENFELD, Assistant Professor of Biology

Conservation deals with the future of man's natural resources, and, therefore, with the future of man himself. In addition to natural resources essential to man, equally important are those which affect the quality of the environment, as parks and wildlife areas, protection of irreplaceable plant and animal species, and open space planning in metropolitan areas. Conservation also is very much concerned with environmental pollution, caused by the waste materials and technological processes of an industrial society as they affect the urban habitat.

The study of conservation is thus a wedding of the earth and biological sciences to the social and behavioral sciences. The recommended program of study includes Biology 1-2, 8, V1097; Geography 1, 2, 3, 4; and a senior seminar. The program is rounded out by additional elective courses according to the student's interest. The following are suggested: biology (animal behavior and plant geography), geology (physical geology, geomorphology, field geology), geography (conservation theory, soils, hydrology), anthropology, economics, political science, sociology. Students planning further studies in conservation, environmental science, or urban and regional planning are advised to take courses in mathematics and statistics. A summer field course in ecology is recommended.

V. MEDIEVAL AND RENAISSANCE STUDIES

(two separate programs)

Officer in charge, PROFESSOR LORCH.

This program is supervised by the Committee on Medieval and Renaissance Studies:

HELEN H. BACON, Professor of Greek and Latin

MALCOLM W. BEAN, Professor of History, (Columbia University)

INTERDEPARTMENTAL OFFERINGS

JAMES H. BECK, Associate Professor of Art History
HUBERT DORIS, Associate Professor of Music
TATIANA GREENE, Associate Professor of French
JULIUS S. HELD, Professor of Art History
PATRICIA H. LABALME, Lecturer in History
MARISTELLA DE PANIZZA LORCH, Professor of Italian
ELEANOR ROSENBERG, Professor of English
HAROLD STAHLER, Professor of Religion
SUZANNE F. WEMPLE, Assistant Professor of History
BARRY ULANOV, Professor of English

The purpose of this program is to provide an understanding of Medieval and Renaissance civilizations on the basis of interdisciplinary studies. Students will take related courses in various departments. The programs will be set up individually with particular emphasis on one of the disciplines: art history, history (which will combine Medieval and Renaissance Studies), one or more of the literatures, music, or religion.

Prerequisite for Medieval Studies: History 3 The Early Middle Ages and History 4 The High Middle Ages.

Prerequisite for Renaissance Studies: History 4 The High Middle Ages and History 13 The Renaissance in Europe in the Fifteenth and Sixteenth Centuries, or (depending on the field of concentration) History 13 The Renaissance and History 14 The Reformation in Europe in the Sixteenth Century.

Language requirement for Medieval Studies: A reading knowledge Latin and of one Romance or Germanic language. In special cases students may petition for another language.

Language requirement for Renaissance Studies: A reading knowledge of two languages, preferably Latin and Italian.

Required courses: (a) A minimum of eight one-semester courses within the general area of Medieval or Renaissance civilization, selected from a list issued by the chairman. Of these, at least three or four must be advanced courses in the field of concentration. Columbia courses may be taken with the approval of the departments concerned.

- (b) A senior seminar to be taken at least for the first semester in the department of special interest. Independent reading and research on selected problems in Medieval or Renaissance civilization will be incorporated in a senior essay of about thirty pages which the student will complete with the help and guidance of the department of specialization.
- (c) Participation in the Colloquium on Medieval and Renaissance Studies.
- (d) Four obligatory meetings, one each month, will be scheduled for the fall semester of the senior year.

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Colloquium on Medieval and Renaissance Studies.

1970: Classical Tradition in the Middle Ages and the Renaissance.

Obligatory for each major in the second semester of her senior year. Juniors will be invited to participate. Students will be asked to deliver oral and written reports on the work they are doing in the department they have chosen for their specialization, and will also take part in general discussions.

The colloquium will meet weekly for two hours and will be directed by a representative of the committee. Five guest speakers will be invited to lecture and participate.

VI. URBAN STUDIES

This program is supervised by the Committee on Urban Studies:

BERNARD BARBER, Professor of Sociology

HENRY A. BOORSE, Professor of Physics

DEMETRIOS CARALEY, Professor of Political Science
(Chairman; 409 Lehman)

JEAN GOOCH, Assistant Professor of Economics

PATRICIA A. GRAHAM, Associate Professor of Education

BASIL RAUCH, Professor of History

PAULA G. RUBEL, Assistant Professor of Anthropology (Acting Chairman for Spring 1969, 307 Barnard)

BARRY ULANOV, Professor of English

LEONARD ZOBLER, Professor of Geography

The purpose of urban studies is to develop understanding of the basic processes, institutions, problems, and achievements of city life. A major in urban studies can be taken only in conjunction with a concentration in one of the regular departments. Normally the student should choose as major adviser the member of the committee from the department in which she intends to concentrate.

The major seeks, first, to expose the student through departmental and interdepartmental courses to the concepts and findings of a broad variety of disciplines as they bear on urban subject-matter; and second, to encourage the student to acquire the techniques and habits of scholarly investigation through pursuit of more advanced and concentrated work in some particular urban-related discipline including the writing of a senior thesis.

The requirements for a major in Urban Studies are:

- (a) One course dealing primarily with urban subject-matter from each of three of the following departments: anthropology, economics, history, political science, sociology.
- (b) One course dealing primarily with urban subject-matter from each of two other departments, such as art history, English, geography, psychology, biology, architecture, urban planning.

INTERDEPARTMENTAL OFFERINGS

- (c) In the junior year Urban Studies 45-46, and in the senior year Urban Studies 64.
- (d) Satisfactory completion of a concentration in one of the participating departments consisting of not fewer than five courses and the writing in that department of a senior thesis on an urban topic to be approved by the committee.

Note: A list of the specific courses that are approved for fulfilling requirements (a) and (b) and of the departments that offer concentrations for urban studies majors is issued periodically by the committee.

45-46. Junior Colloquium.

Readings, discussions, and reports on important books from various disciplines focusing on the achievements (Autumn Term) and problems (Spring Term) of city life. Open to nonmajors only by permission of the instructors.

Autumn Term: PROFESSOR RAUCH. Spring Term: PROFESSOR FELD.
Bi-weekly meetings. Tues 2:10-4.

[64. Senior Colloquium. Not given in 1969-70.]

THE HERITAGE OF THE HUMANITIES

The following courses have been grouped together as illustrative of the diversified facets of our cultural heritage and traditions. No major is offered in this general area but, for suggestions as to further development of the material, please consult the chairman of one of the humanities or social science departments. Course descriptions may be found in the departmental statements.

Art History 1-2. Introduction to the Study of Art History.

PROFESSOR NYBERG.

Classical Literature 35. The Ancient Novel.

PROFESSOR BACON.

Classical Literature 32. Classical Myth.

Classical Literature C3123x. Greek Drama and Its Influences.

Classical Literature C3124y. Roman Literature. PROFESSOR POUNCEY.

English 82. Seminar in American Literature. PROFESSOR KOUWENHOVEN.

English 83. Modern Literature and Allied Arts. PROFESSOR ULANOV.

English-Art History 84. The Vernacular in the American Arts of Design.

PROFESSOR KOUWENHOVEN.

French 23-24. The Culture and Institutions of France.

PROFESSOR GAVRONSKY.

French 48. The Modern French Novel. PROFESSOR SHRODER.

German 11. Readings: Radical Changes in Modern Thought. MR. BROWN.

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German 55. Masterpieces of German Literature in Translation.

MR. MARAMALDI.

History 3. The Early Middle Ages: 300 to 1050. PROFESSOR WEMPLE.

History 4. The High Middle Ages: from 1050 to 1450.

PROFESSOR WEMPLE.

[Italian V1122y. Studies in the Italian Renaissance (in English).

PROFESSOR LORCH.

Not given in 1969-70.]

History-Italian V1131x. Dante's World. PROFESSORS LORCH and WEMPLE.

[History-Italian V1132y. Petrarch and the Roots of the Modern World.

Not given in 1969-70.]

Italian V1133x. Petrarch and Petrarchism.

PROFESSOR LORCH.

Italian V1134y.

PROFESSOR SANSONE.

English-Italian C3050y. The Renaissance Epic.
and LORCH.

PROFESSORS HANNING

Italian V3642y. A study of contemporary Italian Arts: The Italian Film.

PROFESSOR LORCH and MISS YELLEN.

Music 1-2. An Introduction to Music. PROFESSOR DORIS, MISS CARPENTER
and MR. COOPER.

Oriental Civilizations V3355x-V3356y.

PROFESSORS DE BARY, LALL,

MESKILL, MILLER, VARLEY, and WEBB, MESSRS. BALDWIN, DOERINGER,
GIMELLO, GORDON, and MRS. SRINIVASAN.

Oriental Humanities V3399x-V3400y.

PROFESSORS DE BARY, JOSHI,

MESKILL, MILLER, MORRIS, and YAMPOLSKY, and MR. DOERINGER, MR.
TYLER, MRS. WAKIN, MR. UNDERWOOD, and MR. VAN HORN.

Philosophy 43. Philosophical Implications of the Modern Novel.

PROFESSOR BRENNAN.

[Philosophy 44.

Not given in 1969-70.]

Religion 25y. Religion in Contemporary Society.

PROFESSOR SNOOK.

Religion 26x. Religion in Contemporary Culture.

PROFESSOR STAHLER.

Spanish 13y. The Culture of Spain.

PROFESSOR ORTI.

ANTHROPOLOGY

PROFESSOR: MORTON KLASS (Chairman; 403 Lehman Hall)

ASSOCIATE PROFESSOR: ABRAHAM ROSMAN

ASSISTANT PROFESSORS: BETTE S. DENITCH, PAULA G. RUBEL, JOAN E. VINCENT

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

ASSOCIATE PROFESSORS: ALEXANDER ALLAND, JR., HARVEY PITKIN

ASSISTANT PROFESSOR: GEORGE C. BOND

LECTURERS: SHIRLEY S. GORENSTEIN, ROBERT L. STIGLER, JR.

Anthropology is the study of the biological and cultural development of man, and of the contemporary variety of human societies and their cultures. The student majoring in this field will develop a perspective on man and his ways that is not bound by her own time and culture, and she will find herself drawing upon the literature of such different disciplines as genetics, archaeology, ethnography, linguistics, and the social sciences. While the study of anthropology contributes to a liberal arts education, the student will also receive adequate preparation for further study in graduate school, or for employment in the growing field of applied social change.

Every major is expected to have a general knowledge of all the fields of anthropology and of their interrelationship. Anthropology 1, 2 is required of all majors as a prerequisite to advanced work in the subject. All majors are also required to take Social Organization (V3011). Courses in archaeology, linguistics, physical anthropology and ethnographic areas are strongly recommended for majors. In the junior year, a major will take Readings in Anthropological Theory (41-42), and in her senior year Anthropology 51-52, a seminar for independent research.

In view of the incorporating and synthesizing nature of anthropology, majors will be urged to take well-balanced programs in the humanities, social sciences, and natural sciences, dependent upon the particular interests of the student.

Several major museums and libraries in New York offer exceptional opportunities for research. Various summer schools offer opportunities for research in archaeology and ethnography, and under certain circumstances such work may be credited toward the Barnard degree. Students interested in cultural anthropology will be encouraged, whenever possible, to conduct actual research among ethnic groups in the New York area or, during their summer vacations, in other localities.

In lieu of a major examination, each student in the required senior seminar (51-52) will write a senior thesis.

BASIC COURSES

1, 2. Introduction to Anthropology.

[6]

The nature and diversity of man, his societies and cultures. Autumn Term: The problem of cultural diversity. Biological and cultural development examined in terms of evolutionary and ecological theory.

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Spring Term: The universals of culture. Comparative study of social, economic, and political organization, of religion, the arts and the individual; introduction to ethnological analysis and field research. The prerequisite for Anthropology 2 is Anthropology 1, or permission of the instructor. Open to freshmen. PROFESSOR KLASS. Tu Th 9:10-10:25.

V3201x or y. Physical Anthropology.

Evolutionary theory, population genetics, race, human paleontology and primate behavior. PROFESSOR ALLAND. Hours to be arranged.

Linguistics 21, 22. Introduction to Linguistics.

[5]

The nature of language. Characteristics of phonological and grammatical systems of the lexicon. Evolution of language. Role of linguistics in related disciplines. Modern techniques of linguistic analysis. PROFESSOR MALONE. M W F 2:10.

INTERMEDIATE COURSES

V1004x. Peoples of Africa.

Survey of African cultures, with intensive analysis of selected tribes and regions. PROFESSOR VINCENT. Tu Th 9:10-10:25.

V1024x. Ethnology of Eurasia.

Intensive analysis of selected ethnographic studies reflecting the cultural variation in the Old World. PROFESSOR DENITCH. M W 2:10-3:25.

V1025y. Ethnology of North American Indians.

Survey of the tribes and culture areas of aboriginal North America, with intensive analysis of selected ethnographic studies. PROFESSOR RUBEL. Tu Th 10:30-11:50.

V1028y. Peoples of the Middle East.

Survey of culture areas from North Africa to Pakistan, with intensive analysis of selected studies. PROFESSOR ROSMAN. Tu Th 2:10-3:25.

V3002x. Political Anthropology.

The development and comparative study of political structure and government in non-Western societies. PROFESSOR BOND. Tu Th 5:40-6:55.

V3003y. Problems in Developing Countries.

Analysis and comparison of political and social problems in developing countries, with special reference to Africa. PROFESSOR BOND. M W 5:40-6:55.

V3011x. Social Organization.

The institutions and organization of social life, particularly in the non-literate societies. Kinship and locality in the structuring of society. Prerequisite: an introductory anthropology course. V3011x. PROFESSOR ROSMAN. Tu Th 2:10-3:25.

[V3027y. Culture and the Individual.

PROFESSOR ROSMAN.

Not given in 1969-70.]

V3029y. The Archaeology of the New World.

A survey of the prehistoric past of native American cultures from the time of the aboriginal settling of the New World by Asian immigrants to that of European contact. Special emphasis upon the rise of the New World civilizations in Mexico and Peru and the processes leading to their development. Prerequisite: a year of introductory anthropology and the permission of the instructor. DR. STIGLER. M W 11-12:15.

V3032x. The Archaeology of the Old World.

A survey of the principal areas of cultural development in Europe, Asia, and Africa from the earliest beginning of human culture to the dawn of the first civilization. Prerequisite: a year of introductory anthropology and the permission of the instructor. DR. STIGLER. M W 11-12:15.

V3034y. Language and Culture.

The interrelationships of language, culture, and thought; field methods used in their investigation. Types of linguistic structures and grammatical categories. Social differentiation of language. Linguistic change and ethnohistory; writing systems. Prerequisite: a year of introductory linguistics or introductory anthropology. PROFESSOR PITKIN. Tu Th 11-12:30.

V3037y. Societies in Transition.

An analysis of the changes that are taking place in traditional societies in the twentieth century. Emphasis is on the influence of the traditional cultures on the new institutions. Prerequisite: an introductory anthropology course. M W 2:10-3:25.

V3042y. Primitive Religion.

Ideological systems of simple or preindustrial cultures. Relations between religion and other aspects of culture. Prerequisite: an introductory anthropology course. Tu Th 10:35-11:50.

V3049x. Theory and Results in Archaeology.

Archaeological interpretations of cultural processes, with a survey of past and present theories. Illustrative material from archaeologically significant areas of the world. Prerequisite: the permission of the instructor. DR. GORENSTEIN. M W 7:10-8:25.

V3050y. Field Archaeology.

Introduction to archaeological techniques and methods of interpreting data. Approximately seven field sessions, supplemented by classroom work. Students must pay for their transportation and food when on the trips. Prerequisite: the permission of the instructor. DR. GORENSTEIN. S 9-12.

V3100x. Urban Societies.

Evolution of cities. A cross-cultural view of kinds of urban formations. Examinations within an anthropological context of various aspects of urban life. Prerequisite: an introductory anthropology course or permission of the instructor. PROFESSOR RUBEL. Tu Th 10:30-11:50.

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FOR MAJORS ONLY

41-42. Readings in Anthropological Theory. [0]

Selected readings in major theoretical concepts current in cultural and physical anthropology today. Required of all majors in their junior year. PROFESSORS DENITCH, VINCENT, and Section I, M 2:10-4. Section II, Tu 4:10-6. Section III, W 2:10-4.

[V3700x. Colloquium: Anthropological Problems in Complex Societies.

PROFESSOR WAGLEY.

Not given in 1969-70.]

51-52. Anthropology Senior Seminar. [0]

Discussions and conferences on the researching and writing of the senior essay. Th 4:10-6.

Section I	PROFESSOR KLASS.
Section II	PROFESSOR ROSMAN.
Section III	PROFESSOR RUBEL.
Section IV	PROFESSOR VINCENT.
Section V	PROFESSOR DENITCH.

GRADUATE COURSES

Certain graduate courses, listed in the Announcement of the Graduate Faculties, are open to qualified majors with the consent of the department. Attention is drawn to the following:

G4119x. Native Cultures of Lowland South America.

G4122x. Human Ecology.

G4130x. Primitive Arts and Industries.

G4143x. Culture and Communication.

G4151x. Chinese Society: Structures and Functions.

G4187x. Problems in South Asian Ethnology.

ART HISTORY

PROFESSOR: JULIUS S. HELD (Chairman; 301B Barnard Hall)

ASSOCIATE PROFESSORS: BARBARA NOVAK, DOROTHEA NYBERG

VISITING ASSISTANT PROFESSOR: GEORGE STRICEVIC

OFFICERS OF COLUMBIA UNIVERSITY GIVING INSTRUCTION IN BARNARD COLLEGE:

PROFESSOR: EVELYN HARRISON

ASSOCIATE PROFESSORS: JAMES H. BECK, MIYEKO MURASE, DAVID ROSAND

ASSISTANT PROFESSOR: ANN SUTHERLAND HARRIS

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSORS: GEORGE R. COLLINS, HOWARD MCP. DAVIS

Art is a unique form of human experience. A study of its history will often provide a surprisingly vivid insight into the intellectual currents, the religious doctrines and practices, and the social institutions of the past. The student will see to what extent the unfolding of art is determined by conditions existing outside it, and by the impetus given it by the great creative personalities. She will in consequence gain a deepened understanding of the art of our own time and an ability, often fully appreciated only after she has left college, to enjoy intelligently the great accumulation of art in museums all over the world.

Courses in the history of art are generally of the lecture type. In some courses a third hour offers opportunities for discussions in small groups. Several courses schedule trips to museums and in other ways take advantage of the resources of New York, one of the world's great centers of art. Students are encouraged to take any course for which they qualify in the Department of Painting and Sculpture, School of the Arts of Columbia University. See page 61 for regulations governing these courses. Studio courses do not count toward the major.

Students who want to major in Art History must take at least eight courses in the department. They should select a full-time member of the department as their adviser, preferably during their sophomore year and not later than the beginning of their junior year. They should plan their academic program in consultation with this adviser. The department strongly suggests that students take AH 1-2 and thereafter a broad range of courses so as to be able to appreciate the variety of artistic expression in different countries and periods.

Majors in Art History are required to take the Senior Seminar (97-98) and to write a senior thesis. The topic for the thesis should be chosen in consultation with the appropriate officer of instruction no later than the beginning of the senior year. The thesis must be turned in before the spring recess.

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Students planning to do graduate work should obtain a reading knowledge of at least two of the foreign languages in which the major contributions to the history of art have been made. (Most graduate schools require a reading knowledge of French and German.)

1-2. Introduction to the Study of Art History. [5]

A survey of Western architecture, sculpture and painting. Autumn Term: Greek and classical art, medieval art, and Renaissance art in Italy. Spring Term: Renaissance art in the North, the sixteenth century to the present. Historical and interpretive analysis of form and content, and correlation of the visual arts with their respective cultural surroundings. PROFESSOR NYBERG. Lec. M W 2:10, third hour to be arranged.

43, 44. Introduction to Ancient Art. [4]

Autumn Term: A survey with emphasis on the major arts of architecture, painting and sculpture of Egypt, Mesopotamia, the early Aegean and archaic Greece. PROFESSOR HARRISON. M W F 1:10.

Spring Term: The art of classical and Hellenistic Greece and of Rome down to the time of Constantine. Open to all except freshmen. Either term may be taken separately. PROFESSOR HARRISON. M W F 1:10. Visits to the Metropolitan Museum of Art at hours to be arranged.

51, 52. Medieval Art. [2]

Autumn Term: Christian art from its beginnings in the late antique world in Mediterranean countries through the early Christian and Byzantine periods, with emphasis on mosaics and illuminated manuscripts, followed by the Celtic and Carolingian styles of western Europe. Spring Term: Romanesque sculpture and architecture of Italy and France and Gothic architecture, sculpture, and painting, ending with the introduction of the Italian Renaissance into France. Open to all except freshmen. PROFESSOR STRICEVIC. M W F 10. Visits to the Metropolitan Museum of Art, the Pierpont Morgan Library, and the Cloisters.

53. Christian Iconography. [5]

A study of the sources of Christian iconography in Scriptures and other texts, and of the role played by Jewish and Hellenistic traditions. The crystallization of iconographical patterns under the influence of liturgy, and the liturgical drama and their codification in manuals of painting. PROFESSOR STRICEVIC. M W 2:10-3:25.

54. Byzantine Art. [5]

A survey of Byzantine art from its sources to the fall of Constantinople. The role of the Capital as a new art center will be studied as well as the spreading of Byzantine art to Italy and the Slavonic countries, and its interaction with the art of Western Europe. PROFESSOR STRICEVIC. M W 2:10-3:25.

61. European Architecture from the Renaissance through the Rococo Style. [7]

The developments of Renaissance, Baroque, and Rococo architecture in Italy, France, Germany and England from the fifteenth century to mid-eighteenth. Among the architects to be studied will be Brunelleschi, Bramante, Michelangelo, Delorme, Cortona, Borromini, François Mansart, Hardouin-Mansart, Inigo Jones, Wren, Neumann, and Boffrand. Open to all except freshmen. PROFESSOR NYBERG. Tu Th 10:35-11:50.

63. Italian Renaissance Sculpture. [9]
A survey of sculpture from the thirteenth to the sixteenth centuries, stressing the art of the Pisanos, Donatello, Ghiberti, Verrocchio and the Mannerists, with special emphasis on the sculpture of Michelangelo. PROFESSOR BECK. Tu Th 2:10-3:25.

[64. European Sculpture, Baroque to Modern. PROFESSOR NYBERG.
Not given in 1969-70.]

C3633x. Italian Renaissance Painting (Part I).
A study of painting in Italy from the revival of painting in the late thirteenth century to the early sixteenth century. Emphasis is on the Early Renaissance and on a close analysis of the works of Giotto, Masaccio, and Piero della Francesca. The High Renaissance is discussed less fully with stress on Leonardo da Vinci and Michelangelo and their role in the continuity of tradition. PROFESSOR DAVIS. Tu Th 11-12:15.

66. Italian Sixteenth-Century Painting (Part II). [9]
The course will analyze the terms High Renaissance and Mannerism and will discuss the careers of Leonardo, Raphael, Michelangelo; Parmigianino and Correggio; Titian, Veronese, and Tintoretto; Andrea del Sarto, Pontormo and Salviati as well as portraiture and landscape paintings. PROFESSOR HARRIS. Tu Th 2:10-3:25.

67. Renaissance Painting in Northern Europe. [3]
Painting of the Flemish, Dutch, French, and German schools from the end of the Gothic period through the sixteenth century. Emphasis on Van Eyck, Vander der Weyden, Bosch, Bruegel, Dürer, and Grünewald. Open to all except freshmen. PROFESSOR HELD. M W F 11.

68. Prints and Drawings. [6]
A history of graphic media, from the fifteenth to the twentieth century. The course deals both with technical and stylistic aspects of the field and stresses the contribution of masters such as Dürer, Rembrandt, Goya, and Daumier. Limited to twenty students. PROFESSOR HELD. Tu Th 9-10:15.

70. European and American Architecture from the Eighteenth Century to the Present. [7]
The development of Neoclassical architecture in eighteenth-century Europe and its influence on American architecture; the interaction of historic styles and new structural techniques in the nineteenth century; Louis Sullivan and the development of the skyscraper; finally, American and European architecture of the twentieth century. Open to all except freshmen. PROFESSOR NYBERG. Tu Th 10:35-11:50.

75, 76. European Painting since the Renaissance. [13]
Autumn Term: Baroque and Rococo. Painting in Italy, France, England, Flanders, Holland, and Spain from 1600 to the middle of the eighteenth century, with emphasis on Caravaggio, the Carracci, Poussin, Rubens, Rembrandt, Velazquez, Watteau, Hogarth, and Tiepolo.

Spring Term: Neoclassicism, Romanticism, Realism, Impressionism, and post-Impressionism. Painting from the late eighteenth century to 1900. Emphasis will be on the developments in France, from David to

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Cézanne and Seurat, but with attention to Goya. Constable, and Turner as well. Open to all except freshmen. Art History 75 is a prerequisite for Art History 76. PROFESSOR ROSAND. Tu Th 3:35-4:50.

77. American Art from Colonial Times to the Armory Show. [10]

The development of the arts in America from Colonial times to the Armory Show of 1913 with special emphasis on Realism and Romanticism in the nineteenth century. Open to all except freshmen. PROFESSOR NOVAK. M W 3:10-4:25.

78. Modern European and American Painting. [10]

Fauvism, Cubism, Dada, Surrealism, abstract art and other twentieth-century movements. The impact of radical European innovation in America during and after the Armory Show, and the evolution of a variety of native styles from Marin and Hopper through abstract expressionism to the present. Open to all except freshmen. PROFESSOR NOVAK. M W 3:10-4:25.

81, 82. The Literature of Art. [2]

Study of the literary sources used in art historical research; artists' letters, journals and treatises (by Leonardo, Rubens, Delacroix, Van Gogh), contemporary biographies (Vasari and Van Mander), the ideas and writings of leading critics and scholars (Fromentin, Baudelaire, Ruskin, the Brothers Goncourt, Huizinga, Burckhardt, Wolfflin, Woringer, Berenson, Fry, Panofsky, Gombrich, Read, Malraux). The Autumn Term will be devoted largely to writings of artists and their contemporary critics. The Spring Term will be devoted to theories of modern criticism and scholarship. Intended for junior majors, but also open to senior majors. PROFESSOR NOVAK. F 10-12.

**[83. Masterpieces of Art in the New York Museums. PROFESSOR HARRIS.
Not given in 1969-70.]**

C3662y. Cities and Planning.

Characteristic forms of cities since ancient times. Analysis of the purpose and meaning of forms of preplanning that have been suggested, especially since the Renaissance. PROFESSOR COLLINS. M W 12-1:15.

**[84. (English 84). The Vernacular in the American Arts of Design.
PROFESSOR KOUWENHOVEN. Not given in 1969-70.]**

91. The Arts of China. [13]

A survey of Chinese art from the Neolithic to the last dynastic period of Ch'ing, with emphasis on bronzes, Buddhist art, and great landscape painting of the Sung and later periods. Attention is also given to the arts of Central Asia and India as they affect the arts of China. PROFESSOR MURASE. Tu Th 3:35-4:50.

92. The Arts of Japan. [13]

A survey of the development of Buddhist arts and architecture in Japan as they were introduced from China, including the arts of later periods, with special emphasis on the formation of indigenous art forms such as narrative scroll-painting, decorative screens, and wood-block prints. PROFESSOR MURASE. Tu Th 3:35-4:50.

ART HISTORY

[93, 94. The Art of India and of the Near East.

DR. SRINIVASAN. MRS. SOUCEK.

Not given in 1969-70.]

97-98. Senior Seminar.

[3]

Special problems in art history, chosen to give students an insight into basic questions and methods pertaining to this field. Especially designed to place the materials and ideas of art history into broad perspective. Oral reports, readings of literary sources, group discussions. Autumn Term: PROFESSOR NOVAK. Spring Term: PROFESSOR HELD. Section I F 1:10-3. Section II F 3:10-4:50.

STUDIO COURSES

A maximum of 4 courses of studio work may be credited. Students taking more than 2 courses of studio work are required to validate the additional credit with courses in art history. Students may register only with written permission of the departmental representative (PROFESSOR LEON GOLDIN, Cooper Hall, and, after 2 courses, with that of PROFESSOR HELD as well). For further details see the Bulletin of the School of the Arts. Credit for the following: 1 course each term.

Drawing R1001x, R1002y; R1003x, R1004y. Drawing Workshop.

Model fee: \$10.00 per term. MESSRS. GOLFINOPOULOS, HARRISON, and KRIESBERG. Section I M W 1:10-4. Section II Tu Th 1:10-4. Section III M W 7:10-10 p.m. Section IV Tu Th 7:10-10 p.m.

Painting R1011x, R1012y; R1013x, R1014y. Painting Workshop.

Model fee: \$10.00 per term. PROFESSORS GOLDIN and HELIKER, and MESSRS. GOLFINOPOULOS and STEFANELLI. Section I M W 9-11:50. Section II M W 1:10-4. Section III Tu Th 1:10-4. Section IV M W 7:10-10 p.m. Section V Tu Th 7:10-10 p.m.

Painting R1017x, R1018y. Painting and Design.

Laboratory fee: \$10.00 per term. MR. STEWART. Tu Th 9-11:50.

Printmaking R1041x, R1042y. Woodcut and Wood Engraving.

Laboratory fee: \$10.00 per term. MR. UCHIMA. Tu Th 7:10-10 p.m.

Printmaking R1043x, R1044y. Etching and Engraving.

Laboratory fee: \$10.00 per term. MR. HARRISON. Tu Th 1:10-4.

Sculpture R1023x, R1024y. Clay Modeling and Drawing.

Model fee: \$10.00 per term. PROFESSOR PADOVANO. Tu Th 7:10-10 p.m.

Sculpture R1025x, R1026y. Carving and Design.

Laboratory fee: \$10.00 per term. PROFESSOR SWARZ and MR. CAMPBELL. Section I M W 9-11:50. Section II M W 7:10-10 p.m.

Sculpture R1027x, R1028y. Welding and Design.

Laboratory fee: \$10.00 per term. PROFESSORS PADOVANO and SWARZ. Section I Tu Th 9-11:50. Section II M W 7:10-10 p.m.

BARNARD COLLEGE

NOTE:

On leave for the academic year 1969-70: PROFESSOR ANDRE RACZ.
Acting Chairman and Departmental Representative for the academic year
1969-70: PROFESSOR LEON GOLDIN.

GRADUATE COURSES

Certain graduate courses given at Columbia University are open to qualified majors with the consent of the chairman of the department and the major adviser. A description of these courses will be found in the Announcement of the Graduate Faculties. The following courses are specifically recommended as suitable for Barnard seniors:

G4075y. Art of Negro Africa. PROFESSOR BADNER. M 7:10-9.

G4370x. Gothic Art of the Twelfth Century.

PROFESSOR BRANNER. Th 10-11:50.

G4410x. The Classical Tradition and the Renaissance. PROFESSOR BRENDEL. F 10-11:50.

G4543x. Sixteenth-Century French Architecture.

PROFESSOR NYBERG. M 10-11:50.

G4469y. Development of Landscape Painting in Europe 1500-1700.

PROFESSOR HARRIS. Tu 4:10-6.

G4552y. Baroque Architecture in Rome. PROFESSOR HIBBARD. M 4:10-6.

G4578x. Painting in Britain 1740-1840. PROFESSOR TOMORY. W 2:10-4.

G4642y. Modern Art and Tradition. PROFESSOR REFF. F 2:10-4.

BIOLOGICAL SCIENCES

PROFESSORS: WILLIAM A. CORPE, DONALD D. RITCHIE (Chairman; 316 Milbank)

ASSOCIATE PROFESSORS: PATRICIA L. DUDLEY, FREDERICK E. WARBURTON

ASSISTANT PROFESSORS: DAVID W. EHRENFELD, PATRICIA N. FARNSWORTH

OFFICERS OF COLUMBIA UNIVERSITY GIVING INSTRUCTION IN BARNARD COLLEGE:

PROFESSORS: SHERMAN BEYCHOK, JAMES E. DARNELL, CYRUS LEVINTHAL, FRANK G. LIER, JOSEPH MAZZEO

ASSOCIATE PROFESSORS: WALTER J. BOCK, ALBERTO L. MANCINELLI

ASSISTANT PROFESSORS: DOMINICK V. BASILE, THOMAS G. EBREY, MICHAEL J. SCHNEIDER, DAVID ZIPSER

INSTRUCTOR: MILTON ADESNIK

The major program is designed to serve a variety of needs. Some students interested in general education major in biology because they desire specific knowledge of living organisms. Other students specialize in biology in anticipation of graduate work in this field, or in preparation for medical or dental school. Still others plan a career in government, educational or private research organizations, or they may wish to teach at the elementary or intermediate school level.

The sequence of courses to be followed will depend on the ultimate aims of the student and will be planned in consultation with members of the department. Planning of the course sequence in biology and related fields is necessary to provide a balanced program and to assure that prerequisites for advanced courses are completed in time.

Course 1-2 should be elected by those students who had a standard biology course in high school, as well as by those who have had no previous training in biology. Some courses taken outside the department may be counted toward a biology major.

Biology V1097x and Biology W1095x-W1096y are recommended courses, but may not be counted toward the biology major requirement. Courses at the 4000 level require special permission.

Chemistry 1, 8, 41 and 42 fulfill the minimum requirements in chemistry for graduate work in biology and for entrance into medical school, and this amount is generally regarded as the minimum for biology majors as well. A year of general physics, 3-4, should be taken by majors who plan on graduate work or a career in medicine. Graduate work in biology requires a knowledge of German and French (or some other modern language). College mathematics, including calculus, is strongly recommended.

Students are encouraged to do summer work in biological laboratories or field stations. Assistance toward such work may be awarded to qualified students through the Edna Henry Bennett Memorial Scholarship Fund or the Herbert Maule Richards Fund.

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Research projects may be selected by students desiring to do individual work. They are usually related to current faculty research and may lead to professional publication. Greenhouse space and laboratory equipment are made available for such projects.

1-2. General Biology.

[1]

The development of biological knowledge, with emphasis on unsolved problems and the nature of scientific evidence; energy relations of living things, cellular activities, inheritance, development and differentiation, evolution, ecology, and social implications. PROFESSORS EHRENFELD, FARNSWORTH, and RITCHIE. Lec. M W F 9. Lab. (3 hours) M 1:10-4; Tu 9-11:50; 2:10-5; W 1:10-4; Th 9-11:50; 2:10-5; F 1:10-4.

C1007x. General Biology.

Molecular biology, with emphasis on bacteria and viruses. The synthesis of large and small molecules, enzyme mechanisms and various aspects of genetics and cellular control of syntheses. Evolution of more complicated processes in simple multicellular organisms: structure and function of organelles in cells of higher organisms; general problems of development. Higher organism physiology, with emphasis on man. Evolution and the principles of classification of plants and animals; the origin of life on earth. Prerequisite: any full-year course in calculus and one of the following: Physics C1006 or Chemistry C1006 or Chemistry C1007. MESSRS. LEVINTHAL AND DARNELL. Lec. M W F 11. Recit. Tu 1:10-3.

C1008y. Project Laboratory in General Biology.

A project laboratory course in molecular biology, with emphasis on DNA, RNA, and protein syntheses and their control. Part I: students repeat an experiment which has been reported in the recent literature. Part II: students carry out an experiment which they have designed in consultation with the instructor. Prerequisite: Biology C1007 and the instructor's permission. Limited to approximately 20 students. MR. ADESNIK. Lab. 8 hours to be arranged.

[V1097x. Man and Nature. PROFESSOR EHRENFELD. Not given in 1969-70.]

5. Introduction to Genetics, B.

[7]

Mendelian and quantitative genetics of plants, animals, and man: segregation, recombination, measurement of linkage, and the genetics of continuous variation. Cytogenetics. Developmental genetics. Population genetics and evolution. Human genetics will be emphasized where it exemplifies general principles. Prerequisite: a course in introductory biology; calculus or statistics, or the instructor's permission. PROFESSOR WARBURTON. Lec. Tu Th 10. Recit. 1 hour recitation and demonstration.

6. Evolution.

[1]

A consideration of the theories and data relevant to the origin and evolution of living forms, with emphasis on animals. Prerequisite: a year of college-level biology. PROFESSOR WARBURTON. Lec. M W 9. Laboratory-conferences (4 hours) to be arranged.

7. Invertebrate Zoology.

[8]

Evolution of invertebrate animals. Comparative study of microscopic and gross structure, physiology, life histories, behavior and distribution

BIOLOGICAL SCIENCES

of invertebrates. Major emphasis on evolution. Some field trips to representative habitats. Prerequisite: A year of college-level biology. PROFESSOR DUDLEY. Lec. Tu Th 11. Lab. (4 hours) M 1:10-5 or Th 2:10-6.

8y. Ecology.

[4]

The interaction of invertebrate and vertebrate animals with their physicochemical and biological environment. Dynamics of population structure, rhythms, behavior, competition, and adaptation. Prerequisite: a year of college-level biology. PROFESSOR DUDLEY. Lec. M W F 1:10. Field trips to be arranged.

10. Microbiology.

[5]

An introduction to the study of microorganisms, with emphasis upon the bacteria. Their general biology, physiology, pathogenesis and importance in human economy will be emphasized. Prerequisite: a year of biology with laboratory. PROFESSOR CORPE. Lec. M W 2:10. Demonstration W 3:10-4.

W1095x-W1096y. History of Biology.

A general survey of the historical development of the biological sciences, with readings in the primary sources. Lectures, discussions, and reports. May not be counted toward major. PROFESSOR MAZZEO. Lec. Tu Th 1:10. Conf. 1 hour to be arranged.

12. Cytology.

[7]

The biology of cells: composition, development, and activities of cell walls, membranes, mitochondria, plastids, and chromosomes. Laboratory includes practice in fixation, sectioning, homogenization, smears, photomicrography, and specialized types of microscopy. Prerequisite: a year of biology with laboratory. Permission of instructor required. PROFESSOR RITCHIE. Lec. Tu Th 10. Lab. (6 hours) individually arranged.

[14. Developmental Biology. Not given in 1969-70.]

15. Cellular Physiology.

[4]

An interpretation of vital phenomena at the cellular level in terms of known laws of physics and chemistry. Topics to be discussed will include the functional organization of cells; the relation of cells to their environment; molecular biology and physiology of membranes; bioenergetics; and the irritability and contractility of cells. Permission of the instructor required. PROFESSOR FARNSWORTH. Lec. M W 1:10 and Conf. F 1:10. Lab. (4 hours) Tu 2:10-6 or W 2:10-6.

W3002y. Structure and Function of Animals.

Introduction to animal form and function, with emphasis upon the comparative and evolutionary approaches. Interrelationship between the form-function complex and the environment of the organism; different morphological solutions to the same environmental problem. Laboratories include dissections of structures and the analysis of their function. Prerequisite: Biology F1001-1002 or the equivalent. PROFESSOR BOCK. Lec. M W F 9. Lab. Sec. I: M 1:10-5. Sec. II: W 1:10-5. Sec. 3: Th 1:10-5.

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C3071x. Biochemistry.

Chemistry and metabolism of amino acids, carbohydrates, lipids, and of the macromolecular constituents of living systems. Elementary thermodynamics in biochemical equilibria. Enzymes and proteins in respiration. Introduction to some well-established relationships between structure and function of the biological macromolecules. Prerequisite: one year each of biology and organic chemistry. Prerequisite or co-requisite: physical chemistry. MR. BEYCHOK. M W F 10.

W3222y. Evolution and Diversification of Land Plants.

An introduction to land plants in which the forms and life cycles of the major divisions of land plants are compared and contrasted. Evolutionary modifications leading to the appearance of flowering plants are emphasized. Prerequisite: Biology F1001-1002 or the equivalent. MR. BASILE. Lec. Tu Th 10. Lab. Tu or Th 1:10-5.

W3241x. Structure and Interaction of Plant Communities.

Plant communities are discussed with reference to the ecosystem concept. Topics will include energy interchange, biogeochemical cycling, limiting environmental factors, ecological regulation, and biome composition. Prerequisite: Biology F1001-1002 or the equivalent. PROFESSOR LIER. M W 7:10-8:25 p.m.

61, 62. Problems in Biology.

[0]

Independent work will be planned to suit the needs of the student after consultation with the instructors. STAFF. Hours and credit by arrangement.

71. Senior Seminar.

[0]

Reading of literature and discussion of fundamental problems of zoology. PROFESSOR WARBURTON. Hours by arrangement.

G4002y. General Physiology.

An introductory course in general and comparative physiology with emphasis on the physiology of transduction, amplification, and motility in biological systems. Topics will include membranes, bioelectric potentials, behavior of nerve cells (Hodgkin-Huxley equations), sensory physiology, photosynthesis, and motility. Prerequisite: physical chemistry or the instructor's permission. PROFESSOR EBREY. (4) 3 hours of lectures to be arranged.

G4011x. Plant Physiology.

Cell structures and functions. Water relations of plants. Intermediary metabolism. Nitrogen metabolism. Mineral nutrition. Photosynthesis. Growth and organization in plants. Prerequisite: one year each of chemistry, physics and biology (or botany). PROFESSOR MANCINELLI. 3 Lec. Tu Th 5:10.

G4014y. Plant Photobiology.

The nature of light. Measurements of light. Characterization of light sources. Photochemical reactions. Action and absorption spectra. Chemical and physical properties of plant pigments. Photosynthesis. Photomorphogenesis: phytochrome, high energy reaction, and phototropism. Prerequisite: Biology G4011. PROFESSOR MANCINELLI. 3 Lec. Tu Th 5:10.

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G4015x. Developmental Physiology of Plants.

Control of plant growth by hormones, regulators, and inhibitors. Physiology and biochemistry of plant development considered from conception through reproduction and senescence. Prerequisite: Biology G4011 or the instructor's permission. PROFESSOR SCHNEIDER. Lec. 2 1-hour lectures. Conf. as required.

G4023y. Introduction to Genetics, A.

The structure and function of the genetic material of viruses, bacteria, and higher organisms will be discussed on an intermediate level. The main topics covered will be the genetic code, mutation, genetic recombination, chromosome structure and replication, and the control of gene expression. Prerequisite: introductory biology, biochemistry, calculus. PROFESSOR ZIPSER. 3 hours of lectures and recitation to be arranged.

G4061x. Biology of Microorganisms.

Morphology and chemical and physical structure of microbial cells; growth and general physiology; and the influence of environment on nutrition, enzymes, and metabolism of representative microbial species with emphasis on the bacteria. The lecture series counts as one course for Barnard students. Prerequisite: one year of college biology, one course in organic chemistry and the instructor's permission. PROFESSOR CORPE. Lec. Tu Th 2:10. Lab. Tu Th 3:10-5 and 1 hour to be arranged.

G4212y. Animal Behavior.

Classification of behavior and behavior patterns; the control, development, and evolution of behavior; the adaptive significance of behavior; sensory processes, rhythmic activities, orientation and navigation. Students will work on individual behavior projects with invertebrates or vertebrates. Prerequisites: one year of biology with laboratory and the instructor's permission. PROFESSOR EHRENFELD. Lec. M W 11 and Conf. F 11. Lab. (4 hours) to be arranged.

G4223x. Mycology.

Development, nutrition, and evolution of the main groups of fungi, their role in theoretical biology, parasitism, biological deterioration, and industrial applications. Prerequisite: the instructor's permission. PROFESSOR RITCHIE. Lec. Tu Th 10. Laboratory and field trips, four hours weekly, to be arranged.

G6062y. Advanced Microbiology.

Nature, function, and biosynthesis of ultrastructural components of microbial cells. Selected topics of current importance in bacterial physiology. The lecture series alone counts as one course for Barnard students. Prerequisite: Course G4061x or the equivalent and permission of the instructor. PROFESSOR CORPE. Lec. Tu Th 2:10. Lab. Tu Th 3:10-5 and one hour to be arranged.

CHEMISTRY

PROFESSORS: EDWARD J. KING Chairman; 823 Altschul), EMMA D. STECHER¹

ASSOCIATE PROFESSOR: BERNICE G. SEGAL

ASSISTANT PROFESSOR: JACQUELINE I. KROSCWITZ

LECTURER: GRACE W. KING

ASSISTANTS: SHEILA BASSMAN, LEA FISCHBACH, BARBARA GOODSTEIN

Chemistry majors seek to understand the structure of proteins, why nickel chloride is green, how xenon reacts with fluorine, the peculiar bonds in boron hydrides and benzene, and other aspects of the nature of substances and their transformations. Chemists have taken a leading part in the development of our modern scientific and technological society. The influence of chemistry on other sciences is indicated by the growth of such advanced disciplines as biochemistry and molecular biology, chemical physics, and geochemistry. Upon graduation, some chemistry majors obtain research positions in chemical industry and medical laboratories. Others become technical writers or editors or science librarians. Many continue with graduate work in chemistry or related sciences or enter medical and other professional schools.

A student who is interested in chemistry should consult a representative of the department for advice in planning her program. In the first year she should take Courses 1-8 and start or continue the study of calculus. It is then possible for her to fulfill the basic requirements for the major in three years and to take advanced courses in the senior year. Students who have taken an Advanced Placement Course in secondary school may be given advanced placement and credit if they obtain a score of 4 or 5 on the examination and present evidence of satisfactory laboratory experience. A list of major requirements, several possible course sequences, and information about the major examination may be obtained from members of the department. Majors who complete a specific program receive an accrediting certificate from the American Chemical Society.

The new laboratories of the department are modern and well equipped both for course work and for independent projects. Experience with modern instruments begins in the first-year course. Students may undertake independent projects under the guidance of members of the department. This has been done recently during both the academic year and the summer, and some of the work has been published in chemical journals. Short projects may also be undertaken in several of the courses of the first three years.

1. General Elementary Chemistry.

[6]

A study of chemical principles with applications to inorganic chemistry. No credit will be given for Course 1 unless Course 2 or Course 8 is completed. PROFESSOR KING, DR. KING, and assistants. Lec. Tu Th 9:10-10:25.

¹ Absent on leave, Spring Term.

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Recitation and laboratory for students with no previous chemistry:

M 1:10-4:30.

Recitation and laboratory for other students, one afternoon: Tu 2:10-5:30 or W Th or F 1:10-4:30.

2. [General Chemistry. PROFESSOR KROSCWITZ. Not given in 1969-70.]
8. **Qualitative Analysis and Electrolytic Solutions.** [6]
A study of ionic compounds and ionic equilibria. Prerequisite: Course 1. Course 8 is a prerequisite for further work in chemistry. PROFESSOR KING, DR. KING and assistants. Lec. Tu Th 9:10-10:25. Laboratory one afternoon: M, Tu, W, or Th 1:10-5.
41. **Basic Principles of Organic Chemistry.** [3]
Typical reactions of aliphatic compounds with an introduction to aromatic chemistry and emphasis on modern theories. Laboratory work in organic preparations. Prerequisite: Course 8. Laboratory deposit, \$20. PROFESSOR STECHER and assistant. Lec. M W F 11-12:10. Laboratory one afternoon: Tu 2:10-5:30, W, Th 1:10-4:30.
42. **Further Aspects of Organic Chemistry.** [3]
Lectures emphasize aromatic chemistry and more complex molecules including carbohydrates and proteins. Required for biology majors and premedical students. Prerequisite: Course 41. PROFESSOR KROSCWITZ. Lec. M W F 11-12:10.
44. **Modern Practices of Organic Chemistry.** [9]
An introduction to qualitative and quantitative organic analysis and to advanced techniques, including instrumental and chromatographic methods, with a library problem and a short project. Majors must take this course, but it is not required by all medical schools. Prerequisite: Course 41. Laboratory deposit, \$20. PROFESSOR KROSCWITZ and assistant. Lec. Th 1:10. Laboratories two afternoons: Tu Th and if warranted, W 1:10-5.
51. **Physical Chemistry I.** [2]
The laws of thermodynamics and their application to simple chemical systems; kinetic molecular theory; basic concepts of quantum mechanics and the interpretation of heat capacity data. Chemistry majors should take Course 57 in parallel. Prerequisite: Course 8; Mathematics 15, 16 and Calculus III (C1201x) preceding or parallel; Physics 3-4 or equivalent. PROFESSOR SEGAL. Lec. M W F 10. Recitation: one hour to be arranged.
52. **Physical Chemistry II.** [8]
Rates of chemical reactions; thermodynamics of heterogeneous systems; nonelectrolyte and electrolyte solutions; electrochemistry; macromolecules. Applications to analytical processes and biochemistry. Prerequisite: Course 51. PROFESSOR KING. Lec. Tu Th 10:35-11:50.
54. **Physical Chemistry III. Atomic and Molecular Structure.** [2]
Quantum mechanical theory of atomic and molecular structure and chemical bonding; molecular spectroscopy; crystals and symmetry with an introduction to the application of group theory; statistical mechanics. Prerequisite: Course 51. PROFESSOR SEGAL. Lec. M W F 10. Recitation: one hour to be arranged.

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57. Physical Chemistry Laboratory. [0]

Experiments illustrating the physicochemical approach to the study of liquids and gases, thermochemistry, chemical and phase equilibria, chemical kinetics, electrochemistry and radiochemistry. Prerequisite: Course 8; Mathematics 15, 16; Physics 3-4. Parallel: Course 51. Laboratory deposit, \$20. PROFESSOR KROSCWITZ. Lab. M W 1:10-4 or Tu Th 2:10-5, if warranted by registration.

58. Advanced Analytical Laboratory. [0]

The quantitative investigation of chemical systems; instrumental methods of analysis; construction and characteristics of electronic circuits of instruments. Prerequisite: Courses 51 and 57. Preceding or parallel: Course 52. Laboratory deposit, \$20. PROFESSOR SEGAL. Lab. M W 1:10-4 and, if warranted by registration, Tu Th 2:10-5.

63. Advanced Laboratory Course. [0]

Laboratory investigations arranged to suit the individual student who seeks more experience in synthetic inorganic or organic chemistry or who wishes to explore more thoroughly selected instrumental methods. Prerequisite: three years of college chemistry. Laboratory deposit, \$20. STAFF. Hours to be arranged.

C3072y. Bio-organic Chemistry.

Selected aspects of the chemistry of amino acids and peptides, nucleotides and nucleic acids, plant and animal pigments, and other molecules having biological function. Prerequisite: Course 42. PROFESSOR DAWSON. Tu 9-10:50 and Th 10.

87, 88. Problems in Chemistry. [0]

Advanced individual laboratory projects for students who have completed the major requirements. Laboratory deposit, \$20 each session. PROFESSORS KING, KROSCWITZ, SEGAL, and STECHER. Eight hours by arrangement.

GRADUATE COURSES

Certain graduate courses given at Columbia University are open with the consent of the department and the major adviser to qualified majors.

DANCE

DANCE STAFF OF PHYSICAL EDUCATION DEPARTMENT: GAY DELANGHE,
SANDRA GENTER, LIN LERNER, JEANETTE ROOSEVELT, JANET SOARES.
(209 Barnard Hall)

The Barnard Dance Workshop is a group of advanced dancers who have opportunities to perform in concerts and programs integrated with drama and other departments. Symposiums, master classes conducted by guest artists and other special events are offered. For further information consult a member of dance staff. Students majoring in other departments may elect the following dance courses or the courses related to dance. These courses are described in the respective departmental announcements.

ENGLISH

33-34. Play Production. PROFESSOR JANES and MR. PACE.

MUSIC

V1109x-V1110y. History of Dance. MRS. ROOSEVELT and MR. SORELL.

1-2. An Introduction to Music. PROFESSOR DORIS, MISS CARPENTER and
MR. COOPER.

PHYSICAL EDUCATION

Dance Technique. (Modern and Ballet). DANCE STAFF.

Dance 3-4. Dance Composition. MRS. SOARES.

DRAMA

DIRECTOR OF THE MINOR LATHAM PLAYHOUSE: KENNETH JANES (218 Milbank Hall), ASSOCIATE PROFESSOR OF ENGLISH

ASSISTANTS TO THE DIRECTOR: JANET SOARES, DONALD PACE

The Minor Latham Playhouse is the center of activities for Barnard students interested in the theater. Majoring in various departments, the students bring to the Playhouse their special abilities and the experience of such courses as those listed below. For further information, consult PROFESSOR JANES. Students participate in the staged productions, the experimental and classic drama, dance and opera studio projects of The Barnard College Theatre Company. The Gilbert and Sullivan Society and the Spanish, French, German, Russian, and Italian clubs work in close cooperation with the theater program. The Barnard Bulletin's drama column and WKCR (the Columbia radio station) offer other opportunities to develop abilities related to the theater arts. Barnard's location in New York enables students to attend productions on and off Broadway.

Among the courses concerned with the theater are these, described in detail in the departmental announcements:

ENGLISH

- 13, 14. Dramatic Writing. PROFESSOR TEICHMANN.
- 21. The Uses of Speech. PROFESSOR NORMAN and MISS CAUGHRAN.
- 23, 24. Oral Interpretation of Literature. MISS CAUGHRAN.
- 27. Public Speaking. PROFESSOR NORMAN.
- 28. Persuasive Speaking. PROFESSOR NORMAN.
- 29. Introduction to the Theatre. MR. PACE.
- 33, 34. Play Production. PROFESSOR JANES and MR. PACE.
- 35, 36. The Actor's and Director's Interpretation of Dramatic Literature. PROFESSOR JANES.
- 63, 64. Shakespeare. PROFESSOR PATTERSON.
- 69. Renaissance Drama. PROFESSOR PATTERSON.
- 86. Drama from Ibsen to the Present. PROFESSOR ULANOV.

FRENCH

- 18. Advanced Oral French. PROFESSOR RIFFATERRE.
- 34. The Classical Theater. PROFESSOR BAILEY.

GERMAN

- 15. Goethe and Schiller. PROFESSOR SAKRAWA.
- 26. The Modern German Theater. PROFESSOR BRADLEY.

D R A M A

GREEK AND LATIN

Classical Literature C3123x. Greek Drama and Its Influences.

[Greek V3305x. Tragedy. PROFESSOR PORTER. Not given in 1969-70.]

Greek V3307x. Greek Comedy. PROFESSOR TARAN.

ITALIAN

V3642y. A Study of Contemporary Arts: The Italian Film.

PROFESSOR LORCH and MISS YELLEN.

MUSIC

V1005x. The Opera. PROFESSOR BEESON.

V1109x, V1110y. History of Dance. MRS. ROOSEVELT and MR. SORELL.

RUSSIAN

[V1229x. Russian Drama and Theater. PROFESSOR BELKNAP.

Not given in 1969-70.]

SPANISH

[21-22. The Spanish Drama. PROFESSOR UCELAY. Not given in 1969-70.]

ECONOMICS

PROFESSORS: MARION HAMILTON GILLIM, RAYMOND J. SAULNIER
(Chairman; 410 Lehman Hall)

ASSOCIATE PROFESSOR: JEAN GOOCH

ASSISTANT PROFESSOR: DEBORAH D. MILENKOVITCH

ASSISTANT: ANNA M. SACHKO

OFFICERS OF COLUMBIA UNIVERSITY GIVING INSTRUCTION TO BARNARD STUDENTS:

PROFESSORS: PHILLIP CAGAN, AARON W. WARNER

ASSISTANT PROFESSORS: JAMES HEILBRUN, ROGER C. LAWRENCE,
MERLE WEISS

INSTRUCTOR: DAVID GOLD

As a major in economics, a student may arrange a program, with the help of her departmental adviser, to suit her individual needs and interests. For those planning graduate study in economics, special attention to economic analysis and statistics is recommended. Suitable programs can be arranged for students desiring to enter other professional schools or planning to go directly into careers in business, research, government or teaching. An appropriate sequence of courses can be planned, also, for the student whose interest is primarily in economics as a basis for informed citizenship.

A student majoring in economics will be required to take Courses 1 and 2; 27 or 28; and the senior seminar, 51-52. Courses 7, 8 and both 17 and 18 are strongly recommended.

Other social sciences: In view of the essential unity of the social sciences, a major is required to take, in addition to a minimum of 8 courses in economics, one course in each of two of the following departments, selected in conference with her adviser: anthropology, geography, government, history, philosophy, psychology, religion, sociology.

Each student is required to prepare a research paper in connection with the senior seminar, 51-52. No major examination is required.

1. Introductory Economics.

A study of basic economic concepts with emphasis on the analysis of the aggregate economy. Subjects covered include national income and its determination, business and labor organizations, business cycles, government finance and monetary economics. PROFESSORS GILLIM, GOOCH and MILENKOVITCH, and an additional instructor to be announced. Section I M W F 10. [2] Section II Tu Th 9:10-10:25. [6] Section III Tu Th 2:10-3:25. [9] Section IV Tu Th 10:35-11:50. [7]

2. Introductory Economics.

Subjects covered include the determination of price and income distribution through supply and demand; monopoly and antitrust policy; international economics; problems of developing nations; and alternative economic systems. PROFESSORS GILLIM, GOOCH and MILENKOVITCH,

and an additional instructor to be announced. Section I M W F 10.
 [2] Section II Tu Th 9:10-10:25. [6] Section III Tu Th 2:10-3:25.
 [9] Section IV Tu Th 10:35-11:50. [7]

7. United States Economic History. [4]

The causes of economic growth in the United States between the Colonial period and the Civil War. In illustrating the changing relations among the factors of production—land, labor, capital and entrepreneurship—emphasis will be placed on advances in technology, movements of capital and the contributions of all ethnic groups to the development process. PROFESSOR GOOCH. Th 1:10-3:25.

8. United States Economic History. [4]

The development of the American economy from the Civil War to the present time. Changes in the structure of market demand, in costs and in technology will be examined for their effect on industrial, financial and social institutions. The adequacy of the enterprise system, together with government, to solve the economic and social problems of earlier decades in contrast to those of the nineteen-sixties will be critically examined. PROFESSOR GOOCH. Th 1:10-3:25.

16. Government Finance and Fiscal Policy. [9]

Principles of government expenditure and taxation, and the American systems of spending and taxing. Government debt; government finance in relation to the distribution of national income and wealth and to economic growth and stability; and intergovernment fiscal relations in the United States and in common markets. Prerequisite: Courses 1, 2 or permission of instructor. PROFESSOR GILLIM. Tu 2:10-4.

17, 18. Introductory Statistics. [1]

Autumn Term: The gathering, processing, presentation and analysis of statistical data; linear correlation; and an introduction to statistical inference. Spring Term: Index numbers; time series; multiple correlation; and other techniques used in the social sciences. Prerequisite: Course 17. PROFESSOR GILLIM. Lec. M W 9. Lab. (2 hours) M 2:10-4 or Tu 2:10-4 or 4:10-6.

[23. International Economics. PROFESSOR GILLIM. Not given in 1969-70.]

**[24. The Latin American Economy. PROFESSOR GILLIM.
 Not given in 1969-70.]**

25, 26. Contemporary Economic Issues. [5]

A survey of the leading economic issues in present-day American life, including international as well as domestic questions. Lectures and discussion. Open to all except freshmen. Either term may be taken separately. PROFESSOR SAULNIER. M W 2:10-3:25.

27. Intermediate Macroeconomics. [7]

Keynesian and neo-Keynesian analyses of the aggregate economy. Prerequisite: Courses 1, 2. PROFESSOR GOOCH. Tu Th 10:35-11:50.

28. Intermediate Microeconomics. [7]

Theory of consumer demand, the pricing of goods and services in perfect and imperfect competition, the pricing of the factors of production, and a brief history of these ideas. Prerequisite: Courses 1, 2. PROFESSOR GOOCH. Tu Th 10:35-11:50.

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29. The Economics of Underdeveloped Areas. [5]

The economic, demographic, social and cultural forces affecting the economic growth of underdeveloped countries. A short paper is required. Prerequisite: Courses 1, 2 or permission of instructor. PROFESSOR MILENKOVITCH. M W 2:10-3:25.

30. Comparative Economic Systems. [5]

An analysis of the principles of planned and market economies. Systems are compared from a theoretical point of view and through the study of typical economies: the United States, the Soviet Union, China, Yugoslavia and France. Prerequisite: Courses 1, 2 or permission of instructor. PROFESSOR MILENKOVITCH. M W 2:10-3:25.

33. Economic Planning. [13]

Planning techniques such as input-output analysis and linear programming and their applications to economic policy. Planning of national economies in Western Europe, Soviet bloc and underdeveloped countries. Regional planning, including metropolitan regions. Prerequisite: One of the following courses: Economics 16, 27, 28, 29 or 30. PROFESSOR MILENKOVITCH. Th 3:35-5:25.

36. Colloquium on Political Economy. [0]

Selected topics in political economy: social values underlying economic theories; economic institutions and political power; cooperative property and participatory democracy. Readings from Smith, Marx, Veblen, Weber, Galbraith, Marcuse, Polanyi and others. Specific emphasis to be determined by the interests of participants. Permission of the instructor required. PROFESSOR MILENKOVITCH. Th 3:35-5:25.

51-52. Economics Seminar. [0]

Reading, reports, and discussion centering around the preparation of a senior essay. Required for senior majors. PROFESSOR SAULNIER. W 3:30-5:30.

61, 62. Studies in Economics. [0]

Additional credits may be obtained in this course for independent work done in connection with some other course in economics. Special reports, a term paper, or the completion of supervised field work is required. The course may be repeated. MEMBERS OF THE DEPARTMENT.

G4713x-G4714y. Financial Institutions.

A study of the functioning of the principal public and private agencies comprising the financial system of the United States from the point of view of their relation to the flow of money payments and the process of capital formation. Open to seniors. Prerequisite: Courses 1, 2 and at least two other courses in economics. PROFESSOR SAULNIER. Tu 2:10-4.

F3111x. Intermediate Mathematics for Economists.

Elementary set theory, matrices and vectors, linear algebra, differential and integral calculus, with some applications to economic theory. Prerequisite: Two semesters of calculus. Instructor to be announced. M W 4:10-5:25.

V3413y. Seminar on Quantitative Research.

For students with advanced interests in the application of mathematics and statistics to economic analysis. The principles and method of econometrics. Assigned readings in the theory of multivariate statistical analysis and a critical survey of representative applications. Each student is responsible for a closely supervised piece of econometric research. Prerequisite: Courses 17 and 18. Instructor and hours to be announced.

C3041y. Monetary Economics.

The nature and role of money; banking system of the United States, including role of the Federal Reserve; the relation of money to price levels, business cycles, and economic stabilization; international monetary relations and institutions; current problems and policies of monetary management. Prerequisite: Courses 1, 2. MR. GOLD. M W F 10.

W3251x. Industrial Organization and Public Control of Industry.

Organization and structure of American industries and their markets. Competitive behavior, pricing policies, and market performance. Anti-trust policy and other forms of public regulation. Impact of technological change on organization structure and theory. Prerequisite: Courses 1, 2. PROFESSOR WARNER. M W 1:10-2:25.

F3451y. Economics of Labor.

Structural characteristics of the organization of the labor force. Factors determining size, allocation, and remuneration of labor force. Labor unions. Public policy questions and analytical tools available to deal with them. Prerequisite: Courses 1, 2. PROFESSOR WEISS. M W 11:00-12:15.

G4228y. The Urban Economy.

Past and present economic functions of cities. Growth of metropolitan areas. Location theory; theories of site rent and urban form; analysis of the urban economic base. Impact of changing technology and social structure on central cities and suburbs. Problems of older central cities, including transportation, public finance, housing, and urban renewal. Effects of federal policy. The future of the city. Prerequisite: Courses 1, 2 and at least two other courses in economics. PROFESSOR HEILBRUN. M W F 12.

G4901x. Introduction to International Economics.

The role of international trade in resource allocation and the consequence of trade for economic welfare; the balance of payments and foreign exchange market; balance of payments disequilibrium and adjustment; international financial institutions and policy; the theory of protection and commercial policy; trade and development; economic integration. Prerequisite or corequisite: Courses 27 and 28. PROFESSOR LAWRENCE. M W 11 and a third hour to be arranged.

GRADUATE COURSES

Certain other graduate courses given at Columbia University are open to qualified majors with the consent of the department and the major adviser. A description of these courses will be found in the Announcements of the Graduate Faculties and the Graduate School of Business.

EDUCATION

The following interdepartmental program is supervised by the Committee on Education:

MARTHA PETERSON, President, *ex officio*

HENRY A. BOORSE, Dean of Faculty, Professor of Physics, *ex officio*

¹JOSEPH G. BRENNAN, Professor of Philosophy

LAWRENCE A. CREMIN, FREDERICH A. P. BARNARD, Professor of Education, Columbia University

²PATRICIA ALBJERG GRAHAM, Associate Professor of Education (Chairman; 313 Barnard Hall)

ANNETTE K. BAXTER, Associate Professor of History

DEMETRIOS CARALEY, Professor of Government

EDWARD S. COBB, Assistant Professor of Psychology

PATRICK X. GALLAGHER, Professor of Mathematics

RENEE GEEN, Associate Professor of French

BARRY ULANOV, Professor of English

The Education Program does not constitute a major; it is taken in conjunction with a major in some other subject.

The program is open to qualified Barnard students who wish to teach in junior or senior high schools. With the psychology requirement (Psychology 5 or 27), either History 65, or Philosophy 84x, and a course in methods of teaching a specific subject, a student who completes the Education Program receives a New York State Provisional license, which is valid for five years. A permanent license requires a master's degree, which need not include any additional work in education.

All students are enrolled in Education 3-4, which is directly concerned with the principles and practice of classroom teaching.

Before the end of the sophomore year, students interested in teaching should confer with the director of the Education Program. Juniors who wish to apply for admission to the program should file application forms, which may be obtained in the office of the Education Program during the Autumn Term.

Education 3-4. Introduction to Teaching in the Secondary School. [13]

This course affords observation and student teaching in secondary schools. The accompanying seminar examines contemporary issues in American education. Individual conferences assess pedagogical problems encountered in student teaching. Student teaching may be done, preferably during one term four to five half-days a week, or during two terms two half-days a week. All students participate in the seminar

¹ Absent on leave, Spring Term.

² Absent on leave, 1969-70.

EDUCATION

during both terms. If all student teaching is done in one term, it will be designated Education 3 (I) or 4 (I) and will be considered equivalent to two courses, even though credit for Education 3-4 will be equally distributed in both terms. Prerequisite: admission to Education Program. Instructor to be announced. Seminar: Tu 4:10-6.

History 65y. History of Education in the United States. [5]

The development of American education in the context of social and intellectual history. Permission of instructor required. PROFESSOR CREMIN. M 3:10-5.

83. Philosophy of Education. [2]

Classical readings include Plato's *Republic* and Rousseau's *Emile*. The idea of individualism, in both its European and American forms, is traced from Rousseau to Dewey, leading to discussion of problems in present day American educational ideology. Selected readings are assigned concerning ideas of "middle class" and black education. Discussion of theories of higher education is supported by readings from Newman's *The Idea of a University* as well as some related to recent events in American universities. PROFESSOR BRENNAN. M W F 10.

English 98. XII The Teaching of English.

Primarily for students in the Education Program. PROFESSOR PRESCOTT. M 2:10-4.

ENGLISH

PROFESSORS: JOHN A. KOUWENHOVEN, DAVID A. ROBERTSON, JR.,
ELEANOR ROSENBERG, ¹ELEANOR M. TILTON, BARRY ULANOV
(Chairman; 408D Barnard Hall)

ADJUNCT PROFESSOR: HOWARD M. TEICHMANN

ASSOCIATE PROFESSORS: KENNETH H. JANES (Director of Minor Latham
Playhouse), RUTH M. KIVETTE, RICHARD A. NORMAN, REMINGTON
P. PATTERSON (Departmental Representative, 408B Barnard Hall)

ADJUNCT ASSOCIATE PROFESSORS: JOY CHUTE, ELIZABETH HARDWICK

ASSISTANT PROFESSORS: LOIS A. EBIN, ANTHONY G. HENDERSON, JOANN
RYAN MORSE (Director of English A, 401B Barnard Hall), ANNE
LAKE PRESCOTT, MAIRE J. SAID, ²CATHERINE R. STIMPSON

ADJUNCT ASSISTANT PROFESSOR: ELLEN MOERS

ASSOCIATES: ELIZABETH CAUGHRAN, MARJORIE HOUSEPIAN DOBKIN

LECTURER: JANICE FARRAR THADDEUS (Examinations Officer)

INSTRUCTORS: ELIZABETH DALTON, RUTH M. MATHEWSON (Part-time),
DONALD PACE, CHRISTINE ROYER

ASSISTANTS: MARGARET D. HANCE, JANET SOARES

All courses in English are open to nonmajors. The course descriptions list prerequisites and state which classes have limited registration.

A student majoring in English is expected to increase her knowledge of literary history and the development of the English language, to become familiar with the works of a number of the principal writers in English, to gain in ability to interpret and appreciate a variety of literary texts, and to improve her speech and her writing. The major will be required to demonstrate achievement in the disciplines and procedures of English through long essays written in the senior seminars.

In consultation with her departmental adviser, the major will plan her program to include a distribution of courses that present the major writers, the major periods, and the significant genres of the literature. All majors will take Course 93 (or 93y) in the junior year. In addition, a major in literature will take one section of Course 97 and one section of Course 98. A major in writing will be required to do a long piece of work in her senior year, in one of the advanced writing courses. A major in speech will work on a special senior project in one of the advanced courses in her special field.

INTRODUCTORY

A. Reading and Writing.

[0]

An approach to literary skills through intensive reading, regular assignments in composition, and discussion; frequent individual conferences with the instructor. Prescribed for all freshmen. Other English courses

¹ Absent on leave, 1969-70.

² Absent on leave, Autumn Term.

open to freshmen in the Autumn Term are Courses 21 and 27, either of which may be taken parallel to A. With the written permission of the instructor, a freshman may elect a literature course in the Spring Term. PROFESSOR MORSE and MEMBERS OF THE DEPARTMENT. Sections of Course A meet at the following hours: M W F 9, 10, 11, 12:10, 1:10, 2:10. M 3:10-4 and W 3:10-5. Tu Th 9:10-10:25, 10:35-11:50, 2:10-3:25.

Room assignments will be posted outside 401 Barnard Hall.

2. Special Seminar in Reading and Writing. [0]

For students who want additional work in reading and writing at the first-year level. Special reading topics. PROFESSORS PRESCOTT and SAID. Hours to be arranged.

40. Seminars on Special Themes. [0]

Each section will examine in detail a topic which relates the study of literature and the use of the English language to other disciplines. Frequent papers and individual conferences. Topics will be announced in November 1969. Those offered in the Spring Term 1969 included The Uses of Fantasy in Literature, Childhood and Society, Quests and Voyages, The Contemporary British Stage, Psychoanalytic Approaches to Literature, Modern Irish Writers, Literature and Anti-Literature, Books and the Black Experience in America, The Figure of Christ: Mimesis and Interpretation in Literature.

Open to a limited number of freshmen and sophomores who have satisfied the basic requirement in English A. Registration through the class advisers. Course 40 may be accepted, with the approval of the major adviser, in partial fulfillment of the major requirement.

MEMBERS OF THE DEPARTMENT. Sections will meet at the following hours: M W F 10, 11, 12:10; 1:10; 2:10. Tu Th 9:10-10:25; 10:35-11:50; 2:10-3:25.

WRITING

Registration in each course is limited, and the written permission of the instructor is required; signed departmental registration blanks are to be filed with MRS. HANCE (401 Barnard Hall). Before registering for a course numbered 7-14, a student should have earned a grade of B— or better in at least one of the courses numbered 3-6. Two writing courses may not be taken concurrently unless one of the two is Course 13 or 14. Course 93 (or 93y) is to be counted as a writing course.

3, 4. Structure and Style. [0]

English composition above the first-year level. Frequent individual conferences. Students may take either term or both.

- I. Fiction and personal narrative. MISS DALTON. M 2:10-4.
- II. Essays. PROFESSORS KOUWENHOVEN and EBIN. Tu 3:35-5:25.
- III. Autumn Term: exposition. Spring Term: poetry. MRS. THADDEUS. M 3:10-5.

6. Advanced Composition. [0]

The members of the class will keep daily journals and work up the material in finished papers, fiction and nonfiction. MRS. DOBKIN. Th 3:10-5.

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7, 8. Experiments in Writing. [0]

Advanced work in various forms. Individual conferences with the instructor. PROFESSOR HARDWICK. Th 2:10-4.

11, 12. Story Writing. [0]

Advanced work in writing, with emphasis on the short story. Individual conferences with the instructor. Some experience in the writing of fiction is prerequisite to this course. PROFESSOR CHUTE. Tu 4:30-5:25.

13, 14. Dramatic Writing. [0]

The development of a dramatic situation in terms of short fiction, the theater, television, motion pictures, and radio. Completed works are discussed, given dramatic readings by the class, and recorded on tape. PROFESSOR TEICHMANN. Tu Th 2:10-3:25.

SPEECH AND DRAMA

The work of English majors with a special interest in speech should include Course 21 and two half-year courses in public speaking, discussion and debate, voice and diction, or oral interpretation. To elect any course in speech, a student must secure the written permission of PROFESSOR NORMAN. The Barnard College Theatre Company and the Columbia radio station, WKCR, offer practical experience.

Students who have a special interest in the drama will find a summary of activities and courses related to that field on page 72.

21 [or 21y]. The Uses of Speech. [0]

Training in voice production and clear articulation. Designed to improve the student's speech through drill, practice in reading aloud, the presentation of oral reports, and extemporaneous speaking. Use of the language laboratory. Registration limited to 15 students. PROFESSOR NORMAN and MISS CAUGHRAN. Section I (Spring Term only) M W F 11. Section II M W F 1:10.

22. American and British Dialects. [0]

Study of the geographic, class, and vocational dialects of English. Practice in speaking and reading aloud. MISS CAUGHRAN. M W F 11.

23, 24. Oral Interpretation of Literature. [0]

Study of literary texts for oral performance. Autumn Term: fictive prose and poetry, with class projects exploring reading modes from informal presentation to reader's theater. Spring Term: dramatic poetry and drama. MISS CAUGHRAN. M W F 10.

27. Public Speaking. [0]

Study of the basic principles of informal and formal speaking with emphasis on the selection and organization of materials, on audience psychology and on effectiveness of delivery. PROFESSOR NORMAN. Tu Th 10:35-11:50.

28. Persuasive Speaking. [0]

Theory and practice of persuasive speaking: the use of evidence and opinion, logic and audience motivation in the presentation of controversial views and current issues. PROFESSOR NORMAN. Tu Th 10:35-11:50.

29. Introduction To The Theater. [0]

A survey of theater history with special attention to the interrelation of dramatic literature, styles of production, and theater architecture. The theater's place in society. Individual and group project in related research. MR. PACE W 3:10-5.

33, 34. Play Production. [0]

A study of the technical aspects of the theater and the ways in which they complement the work of the playwright, director, choreographer, and actor. Guest lecturers from the professional theater. MR. PACE. M 3:10-5. Lab. (2 hours) to be arranged after first meeting.

35, 36. The Actor's and Director's Interpretation of Dramatic Literature. [0]

Study and practice in classic and contemporary dramatic literature by actors and directors. Permission of the instructor required. PROFESSOR JANES. F 3:10-5.

LANGUAGE AND LITERATURE

For nonmajors, courses marked § will count toward the general college requirement. Course 40 (see page 81) may be accepted, with the approval of the major adviser, in partial fulfillment of the major requirement.

§51, 52. An Introduction to Literary History.

A general view of the scope and variety of English literature and its place in world literature through study of selected writers and their works. Autumn Term: Chaucer through Milton. Spring Term: Dryden to the present. PROFESSORS EBIN, HENDERSON and MORSE. Section I M W F 11. [3] Section II M W F 1:10. [4]

[53. Anglo-Saxon Language and Literature. Not given in 1969-70.]

§55. Chaucer. [7]

Chaucer's *Canterbury Tales*. PROFESSOR PRESCOTT. Tu Th 10:35-11:50.

[§56. Chaucer and his Contemporaries. Not given in 1969-70.]

58. Medieval Literature. [6]

English and Continental literary works from the fourth to the fifteenth century, studied in the original or in translation. PROFESSOR ULANOV. Tu Th 9:10-10:25.

§63, 64. Shakespeare. [3]

A critical and historical introduction to Shakespeare. About fifteen plays—comedies, histories, and tragedies—will be read each term, with emphasis on the major plays in the Autumn Term. PROFESSOR PATTERSON. M W F 11.

§66. Spenser and the Tudor Renaissance. [2]

Humanism, the Reformation, the New World; courtly poetry and popular prose from Skelton and More through Sidney and Nashe, with special attention to Edmund Spenser. PROFESSOR ROSENBERG. M W F 10.

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- §67. Donne and Seventeenth-Century Literature.** [2]
Donne and the "metaphysicals"; Jonson and the Cavalier poets; Raleigh, Bacon, Browne, Burton, and the new science; prose and poetry in the age of Marvell. PROFESSOR ROSENBERG. M W F 10.
- §68. Milton.** [4]
Milton's major poems, important minor poems, and selected prose works; his literary reputation from the seventeenth century to the present. PROFESSOR KIVETTE. M W F 1:10.
- §69. Renaissance Drama.** [5]
Major plays of the English Renaissance from the Tudor interlude to the closing of the theaters, with emphasis on Marlowe, Jonson, and Webster. PROFESSOR PATTERSON. M W F 2:10.
- §72. The Novel.** [12]
The English novel before 1900, including works by Fielding, Richardson, Jane Austen, Bronte, Dickens, George Eliot, Hardy, and James. PROFESSOR MOERS. M W F 12:10.
- §73. The Augustan Age.** [8]
The flowering of comedy, satire, the drama, and the essay in England from the Restoration to 1750, and the beginning of the novel. PROFESSOR HENDERSON. Tu Th 10:35-11:50.
- [§74. The Later Eighteenth Century. PROFESSOR HENDERSON.**
Not given in 1969-70.]
- [§76. Prose and Poetry of the English Romantics. PROFESSOR TILTON.**
Not given in 1969-70.]
- §77. The Victorian Age in Literature.** [5]
Prose and verse concerning problems of society and of religion: Carlyle, Disraeli, Macaulay, Mill, Newman, Huxley, Tennyson, Browning, Arnold. PROFESSOR ROBERTSON. M W F 2:10.
- §78. Victorian Poetry and Criticism.** [5]
Poems by Tennyson, Browning, Arnold, Rossetti, Meredith, Morris, and Swinburne. Essays by Ruskin, Arnold, Meredith, Pater, and Wilde. PROFESSOR ROBERTSON. M W F 2:10.
- §79. American Literature, 1775-1885.** [9]
The Revolutionary period and the major American Romantics: Hawthorne, Poe, Melville, Emerson and the Transcendentalists, Whitman. MISS ROYER. Tu Th 2:10-3:25.
- §80. American Literature, 1865-1965.** [9]
The experimenters in prose and poetry from James to the present. MISS ROYER. Tu Th 2:10-3:25.
- §82. Seminar in American Literature.** [0]
Melville, Whitman, and a twentieth-century writer to be chosen by the student in consultation with the instructor. PROFESSOR KOUWENHOVEN. W 9-11.

83. Modern Literature and the Allied Arts. [9]

The focus and the vocabulary of the modern artist, examined and defined first in terms of literature, and then through a comparison with painting, music, the dance, the theater, and the motion picture. PROFESSOR ULANOV. Tu Th 2:10-3:25.

84 (Art History 84). The Vernacular in the American Arts of Design. [13]

The conflict between the "cultivated" and "vernacular" styles. The development of an American aesthetic in technology, architecture, fine arts, literature, and other arts. PROFESSOR KOUWENHOVEN. Tu 3:35-5:25.

[§85. Modern British and American Poetry. PROFESSOR ULANOV.

Not given in 1969-70.]

86. Drama from Ibsen to the Present. [9]

Reading of English, Continental, and American plays, of which the most important will be analyzed in class. PROFESSOR ULANOV. Tu Th 2:10-3:25.

[87. Major American Writers and Their Foreign Sources.

PROFESSOR TILTON. Not given in 1969-70.]

§88. The Modern Novel. [5]

Works by James, Conrad, Lawrence, Joyce, Forster. PROFESSOR MORSE. M W F 2:10.

90. The English Language: History and Use. [2]

An introduction to the history of words, pronunciation, and structure in the light of literary tradition and linguistic science. PROFESSOR NORMAN. M W F 10.

93 (or 93y). Literary Criticism: Analysis and Evaluation. [0]

The purpose of the course is to provide experience in the reading of literary texts and some knowledge of conspicuous works of literary criticism. Frequent short papers. Registration in each section is limited. Students must file departmental registration forms with MRS. HANCE (401 Barnard Hall) before completing their programs.

All English majors are required to take Course 93 (or 93y) in the junior year. Transfer students should plan to take it in the Autumn Term. If registration allows, a few sophomores and nonmajors may be admitted on application.

PROFESSORS ROBERTSON, ROSENBERG, KIVETTE, HENDERSON, MORSE, and STIMPSON. Section I Tu 3:35-5:25. Section II W 3:10-5. Section III Th 3:35-5:25.

97, 98. Studies in Literature. [0]

Open to majors and nonmajors. These seminars provide opportunities for intensive study of subject matter to which students have already been introduced in other courses. Registration in each section is limited, and the written permission of the instructor is required. Departmental registration forms must be secured from MRS. HANCE and returned to her (401 Barnard Hall).

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All English majors who elect advanced work in literature, rather than in writing or speech, are required in the senior year to take one section of 97 and one of 98. Other students will be admitted to the seminars if the section lists have not been filled.

97. (Autumn Term)

- III. Milton: Studies in Reformation, Revolution, and Reaction. PROFESSOR KIVETTE. Th 3:35-5:25.
- IV. Eighteenth-Century Studies: The Uses of Wit. PROFESSOR HENDERSON. Th 3:35-5:25.
- V. The Romantic Survival. PROFESSOR MORSE. W 3:10-5.
- X. Critical Theory and Critical Taste. PROFESSOR ROSENBERG. W 3:10-5.
- XI. Studies in Style: Film and Word. PROFESSOR ULANOV. Tu 3:35-5:25.

98. (Spring Term)

- I. Medieval and Renaissance Studies: Tradition and Innovation. PROFESSOR ROSENBERG. W 3:10-5.
- II. Shakespeare and Modern Criticism. PROFESSOR PATTERSON. Tu 3:35-5:25.
- VI. The Victorian Imagination. PROFESSOR ROBERTSON. Th 3:35-5:25.
- VIII. George Eliot, Joseph Conrad, D. H. Lawrence. PROFESSOR MORSE. W 3:10-5.
- IX. Conscience and Consciousness: Two Themes in Modern Literature. PROFESSOR STIMPSON. Th 3:35-5:25.
- XII. The Teaching of English. Primarily for students in the Education Program. PROFESSOR PRESCOTT. M 2:10-4.

FRENCH

PROFESSORS: HELEN PHELPS BAILEY, LEROY C. BREUNIG (Chairman; 16 Milbank Hall), MAURICE Z. SHRODER

ASSOCIATE PROFESSORS: SERGE GAVRONSKY, RENEE GEEN,¹ TATIANA GREENE

ASSISTANT PROFESSORS: DANIELLE HAASE-DUBOSC, HERMINE RIFFATERRE, DOMNA STANTON

LECTURER: PATRICIA TERRY

INSTRUCTORS: ERICA ABEEL, EVA CORREDOR, MAXINE CUTLER, JANE GRACE, EDWARD KAPLAN (Part-time), SELMA DE LA QUERIERE (Part-time)

The objective of a student majoring in French is twofold: a) to perfect fluency in the written and the spoken language and b) to develop an understanding and appreciation of the literature and culture of France.

The student in consultation with her major adviser will plan her program to include the following: either Course 21-22, 23-24 or 25-26; two of the language courses 11, 12, 13, 18; four one-term literature courses numbered 31-42; two one-term seminars numbered 51-54. Only seniors with honor grades may elect Course 59-60, senior thesis.

The program may include additional courses from the department's offerings along with work in related fields such as art history, French history, and other subjects which vary with the interest of the student. Majors who plan to do graduate work are urged to acquire a reading knowledge of Latin.

Examinations: 1. The junior French Test, given in December and April of each year, is a two-hour written examination on literary history, literary terminology and translation. Students may take the test at any time before the end of the junior year. (Students who spend the junior year abroad may take the test in December of the senior year.)

2. The major examination consists of a three-hour critical essay on a prepared question and an individual oral *explication de texte* of approximately a half-hour. The examination is based on a selected list of masterpieces which new majors should obtain from their advisers. Students who take Course 59-60 (senior thesis) will be exempt from the written exam, and the thesis defense will constitute the oral section.

FOREIGN LANGUAGE REQUIREMENT FOR THE DEGREE: New students who have already given evidence of advanced training in French may automatically be exempted from the requirement. All other new students who intend to satisfy their foreign language requirement in French will, depending upon their preparation, be placed immediately in the appropriate language course or be asked to take a placement test or an exemption test. Those receiving a sufficiently high grade in the latter test will fulfill the requirement. The others may do so by completing Course 4.

¹Absent on leave, 1969-70.

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LANGUAGE COURSES

All courses are conducted in French.

1-2. Elementary Full-Year Course. [14]

Grammar, reading, composition. Work in the language laboratory is required. MRS. CORREDOR, MRS. GRACE (course chairman). Section I M Tu W Th F 9. Section II M Tu W Th F 10.

2x. Review of Elementary French. [14]

Oral and written review of basic grammar and syntax. Translation, reading, oral practice, free composition. Work in the language laboratory is part of the course. Primarily for students who need further instruction to qualify for the intermediate course. PROFESSOR HAASE-DuBOSC (course chairman) and MEMBERS OF THE DEPARTMENT.

Section I M W F 10.

Section III M W F 2:10.

Section II M W F 12:10

Section IV Tu Th 10:35-11:50.

3. Intermediate Course. [14]

Grammar and syntax. Translation, reading, oral practice, free composition. Work in the language laboratory is part of the course. Prerequisite: Course 1-2, Course 2x, or an appropriate score on the placement test. PROFESSOR RIFFATERRE (course chairman) and MEMBERS OF THE DEPARTMENT.

Section I M W F 10.

Section III Tu Th 10:35-11:50.

Section II M W F 12:10.

Section IV Tu Th 2:10-3:25.

3y. Intermediate Course. [14]

The equivalent of Course 3 but given in the Spring Term. DR. ABEEL and MEMBERS OF THE DEPARTMENT.

Section I M W F 10.

Section III Tu Th 10:35-11:50.

Section II M W F 12:10.

4. French through Literary Analysis. [14]

The study of literary texts from Pascal to Rimbaud as a basis for improving the comprehension of written and spoken French. Work in the language laboratory is part of the course. Prerequisite: Course 3 or an appropriate score on the placement test. DR. CUTLER (course chairman) and MEMBERS OF THE DEPARTMENT.

Section I M W F 10.

Section III Tu Th 10:35-11:50.

Section II M W F 12:10.

Section IV Tu Th 2:10-3:25.

4x. French through Literary Analysis. [14]

The equivalent of Course 4 but given in the Autumn Term. PROFESSOR GAVRONSKY (course chairman) and MEMBERS OF THE DEPARTMENT.

Sec. I M W F 9.

Sec. V Tu Th 9:10-10:25.

Secs. IIa and b M W F 10.

Secs. VIa and b Tu Th 10:35-11:50.

Secs. IIIa and b M W F 11.

Secs. VIIa and b Tu Th 2:10-3:25.

Secs. IVa and b M W F 12:10.

FRENCH

- 9. Composition and Conversation.** [0]
Weekly compositions designed to improve writing skill. Review of grammar and syntax. Pronunciation, recitation, conversations based on selected readings. Work in the language laboratory is part of the course. Prerequisite: Course 5 or a satisfactory score on the placement test. Limited to 15 students. PROFESSOR RIFFATERRE. M W F 1:10.
- 9y. Composition and Conversation.** [0]
The equivalent of Course 9 but given in the Spring Term. PROFESSOR RIFFATERRE. M W F 11.
- 11. Advanced Composition and Explication.** [0]
Free composition on various themes; practice in methods of *explication de texte*. Nonmajors may take the course with the permission of the instructor. PROFESSORS GREENE and RIFFATERRE. M W 2:10-3:25.
- 12. Advanced Translation.** [0]
Translation of various styles of prose and poetry from French to English and from English to French. Nonmajors may take the course with the permission of the instructor. DR. TERRY and PROFESSOR HAASE-DUBOSC. M W 2:10-3:25.
- [13. History of the French Language.** DR. TERRY. Not given in 1969-70.]
- 18. Advanced Oral French.** [0]
Study of spoken French. Practice in pronunciation and intonation through conversation and oral *explications de texte*. Work in the language laboratory is part of the course. Nonmajors may take the course with the permission of the instructor. PROFESSOR RIFFATERRE. M W F 10.

LITERATURE COURSES

For non-majors, courses marked thus § will count toward the general college requirement. All Barnard courses are conducted in French except Course 48.

- §20. Special Themes in French Literature.** [14]
Reading and discussion in French of selected works of contemporary interest. Textual analyses and essays. Each section will examine one of the following themes: Modern Interpretations of Greek Myths, Modern interpretations of Biblical themes; Contemporary Theatre; African and Caribbean writers; Existentialist writers. Prerequisite: satisfaction of the language requirement in French. PROFESSOR SHRODER (course chairman) and MEMBERS OF THE DEPARTMENT.

The section schedule will be announced before pre-registration.

- §20x. Special Themes in French Literature.** [14]
The equivalent of Course 20 but given in the Autumn Term. PROFESSOR STANTON and MEMBERS OF THE DEPARTMENT.

The section schedule will be announced before pre-registration.

BARNARD COLLEGE

§21-22. Masterpieces of Literature from the Middle Ages to the Twentieth Century. [14]

Lectures and discussions in French on the history of French literature. Analysis of texts, essays, and reports on outside reading. Autumn Term: *La Chanson de Roland* through Moliere. Spring Term: Voltaire through Proust. Prerequisite: satisfaction of the foreign language requirement in French. PROFESSORS BREUNIG, BAILEY, GREENE (course chairman), HAASE-DUBOSC and DR. CUTLER. Section I M W F 10. Section II M W F 11. Section III Tu Th 10:35-11:50.

§21y. Masterpieces of Literature from the Middle Ages to the Twentieth Century. Part I. [4]

The equivalent of Course 21 but given in the Spring Term. Credit for Course 21y only on completion of Course 22x. PROFESSOR STANTON. M W F 1:10.

§22x. Masterpieces of Literature from the Middle Ages to the Twentieth Century. Part II. [7]

The equivalent of Course 22 but given in the Autumn Term. Prerequisite: Course 21 or the equivalent. PROFESSOR SHRODER. Tu Th 10:35-11:50.

§23-24. The Culture and Institutions of France. [2]

A study of the formation and evolution of French thought and traditions. Primary sources and audio-visual material will be used. Prerequisite: the same as for Course 21-22. PROFESSOR GAVRONSKY. M W F 10.

[§25-26. French Historical Prose. PROFESSOR GAVRONSKY.

Not given in 1969-70.]

§31. The Middle Ages. [3]

Epic, narrative, and lyric poetry of the Middle Ages from *La Chanson de Roland* through François Villon. Prerequisite: Course 21-22, 23-24, 25-26, or the written permission of the instructor. DR. TERRY. M W F 11.

[§32. Renaissance and Classical Poetry.

Not given in 1969-70.]

§33. Renaissance and Classical Prose. [2]

A study of the prose writers of the sixteenth and seventeenth centuries with emphasis upon Rabelais, Montaigne, Descartes, Pascal, Madame de La Fayette. Prerequisite: the same as for French 31. PROFESSOR GREENE. M W F 10.

§34. The Classical Theater. [7]

The masterpieces of the seventeenth century dramatists: Corneille, Racine, Molière. Prerequisite: the same as for French 31. PROFESSOR BAILEY. Tu Th 10:35-11:50.

§35. Eighteenth-Century Fiction. [9]

Varieties of prose fiction, including selections from the works of Lesage, Marivaux, Prévost, Voltaire, Rousseau, Bernardin, Diderot and Laclos. Prerequisite: the same as for French 31. PROFESSOR SHRODER. Tu Th 2:10-3:25.

FRENCH

- [§36. Eighteenth Century (II). Not given in 1969-70.]
- §37. French Symbolism. [7]
Baudelaire, Mallarmé, Rimbaud; the poetics of the symbolist movement. Prerequisite: the same as for French 31. PROFESSOR BREUNIG. Tu Th 10:35-11:50.
- [§38. Nineteenth Century (II). Not given in 1969-70.]
- [§39. Twentieth Century (I). Not given in 1969-70.]
- §40. Twentieth-Century French Thought. [9]
A study of the major texts from surrealism to structuralism. Prerequisite: the same as for French 31. PROFESSOR GAVRONSKY. Tu Th 2:10-3:25.
- §42. Materials and Techniques of French Poetry. [3]
A study of the language of poetry in France: themes, ideas, emotions (the materials); rhyme, imagery, etc. (the techniques); from early poems in fixed form to the "automatic writing" of the surrealists. Prerequisite: the same as for French 31. PROFESSOR GREENE. M W F 11.
- §48. The Modern French Novel. [6]
The development of the novel from the Romantic period to the present. Authors include Stendhal, Balzac, Flaubert, Zola, Proust, Gide, Malraux, Sartre, Camus, Robbe-Grillet. Readings in French; lectures, discussions, and papers in English. Prerequisite: satisfaction of the foreign language requirement in French. PROFESSOR SHRODER. Tu Th 9:10-10:25.

SEMINARS

The number of students in each seminar is limited and the written permission of the instructor is required in advance of registration period.

51. Ideology and Literature since 1789. [0]
PROFESSOR GAVRONSKY. M W 1:10.
52. The Generation of 1830. [0]
PROFESSOR RIFFATERRE. M W 1:10.
54. Apollinaire. [0]
PROFESSOR BREUNIG. Tu Th 3:35-4:25.
- 59-60. Senior Thesis. [0]
Research into a precise topic of French literature and the preparation of a long essay. Open to seniors with honor grades. The essay satisfies in part the major examination requirement. PROFESSORS BREUNIG and SHRODER. Hours for consultation to be arranged.

BARNARD COLLEGE

GRADUATE COURSES

The following graduate courses are given in English by members of the Barnard French Department. They are open to undergraduates only by written permission of the instructor. French majors may take them in addition to, but not in lieu of, the four literature courses and the two seminars as set forth in the major requirements.

G4603x. French Poetry in the Twentieth Century.

PROFESSOR BREUNIG. W 2:10-4.

[G4505x. French Novel of the Nineteenth Century. PROFESSOR SHRODER.
Not given in 1969-70.]

G6705x. Theory of the Novel.

PROFESSOR SHRODER. F 10-11:50.

COLUMBIA COLLEGE COURSES

The following courses at Columbia College are open to Barnard students who have had Course 21-22 or who receive written permission from the Chairman of the Columbia College Department of French. French majors may take them in addition to, but not in lieu of, the four literature courses and the two seminars as set forth in the major requirements.

C3663x-3664y. Poetry. PROFESSORS KATZ and BLANCHARD.

C3319y. The Idea of Tragedy in England and France during the Sixteenth and Seventeenth Centuries. PROFESSOR KATZ.

C3672x. The Classical Moralists. PROFESSOR SAREIL.

C3673x. The Impressionist Era. PROFESSOR RASKIN.

C3675x-C3676y. Prose Fiction to 1900. PROFESSORS SAREIL and BEAUCHAMP.

The following two-point courses are open to Barnard students but may not be taken for credit:

C3591y. Beckett, Ionesco, Genet. PROFESSOR BRATTON.

C3595y. The New Criticism. PROFESSOR ROUDIEZ.

The following Junior Year in Paris program, under the direction of Columbia College, is open to Barnard juniors with the written permission of their major adviser and of the chairmen of both the Barnard and Columbia French Departments.

C3991x-C3992y. Supervised Study in France.

C3997x-C3998y. Supervised Research in France.

GEOLOGY AND GEOGRAPHY

PROFESSORS: JOHN E. SANDERS, LEONARD ZOBLER (Chairman; 216 Milbank Hall)

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSORS: WALLACE S. BROECKER, CHARLES L. DRAKE, RHODES W. FAIRBRIDGE, WILLIAM A. HANCE, RALPH J. HOLMES, HERMAN F. OTTE

ASSOCIATE PROFESSORS: IAN DALZIEL, ROBERT A. LEWIS, KEMPTON WEBB

ASSISTANT PROFESSORS: ARNOLD L. GORDON, GUNTHER KRUMME

INSTRUCTORS: MICHAEL GREENBERG, LENORE MACOMBER, JOHN E. OLIVER

LECTURER: IAN R. MANNERS

Geology and geography cover the broad spectrum of the earth sciences, the solid, liquid, and gaseous phases of the earth, their properties, interrelations and renewal cycles. Students may acquire a wide perspective or concentrate in one of the traditional fields of specialization as follows: (1) Geology, (2) Geography, (3) Earth Science, and (4) Conservation of Natural Resources.

GEOLOGY

Geology is the study of the geologic cycle of processes operating on the surface of the earth, the history and structure of the earth, the materials composing it, continental movements, properties of the ocean basins, the shore zone between the land and water masses, the separation into land and water masses, the record of evolving life and the chemistry and physics of the earth.

Following the introductory course, majors are required to take courses in mineralogy and petrology, structure, geomorphology, paleontology, and a seminar. Electives, including oceanography, geophysics, regional geology and sedimentology, round out the major. A summer field course is highly desirable. Other courses advised for majors are physics, chemistry, and calculus. The major examination in geology will consist of the Graduate Record Examination.

GEOGRAPHY

Geography is the study of the earth as the home of man. It examines man-environment systems and reciprocal relations between earth and man. It is concerned with the human ecology of natural resource use and how this has affected the spatial ordering and evolution of human occupancy patterns and activities. Geographers must have an appreciation of both the earth sciences and social sciences. With a scientific understanding of

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the earth and its resources, the geographer is able to prepare resource surveys, organize regional development studies, and participate in urban planning.

Majors are required to take the introductory courses, Geography 1, 2, 3, 4. Additional recommended courses include cartography, climatology, economics, and regional geography. Electives will be selected according to student interest; these are urban geography, soil and water resources, geomorphology, population growth, developed or underdeveloped world regions. Students planning to continue their studies are advised to have one year of mathematics and statistics. The major examination will consist of a senior seminar and a senior essay.

EARTH SCIENCE

Earth Science includes those disciplines which examine the structure, properties, and interrelations of the solid, liquid, and gaseous phases of the earth. It includes selected fields of study from geology and physical geography. Emphasis is placed on the renewal cycles and interconnections among the phases.

Students are required to take introductory courses in geology and environmental science, after which courses in geomorphology, soils, hydrology, climatology and a senior seminar fulfill the core requirements. Additional electives include oceanography, regional geology, regional geography, mineralogy and petrology, economic geology, cartography and ecology. A field course is highly recommended. Further studies at a more advanced level require courses in mathematics, physics, and chemistry. The major examination will consist of a senior seminar and senior research paper.

CONSERVATION OF NATURAL RESOURCES

(Sponsored jointly with the Department of Biology.) Conservation is concerned with man's stewardship of the earth as his home and the proper management of its resources. It thus bridges the earth sciences and social sciences. The particulars of this program will be found on p. — under **Interdepartmental Offerings**.

GEOGRAPHY

1, 2. Environmental Science.

The physical environment of man viewed as the summation of interacting natural or man-induced processes and forms close to the earth's surface responsible for habitat quality. Study of renewal cycles at global and local levels, and conservation concepts and environmental management in urban areas. Autumn Term: earth shape, motions, and mapping; earth-sun relations, seasons, time, and energy exchanges; thermal and moisture cycles, atmospheric patterns, and climate regions. Spring Term: earth's surface relief features; rock weathering and soils; hydrologic cycle analysis, stream patterns, and landform evolution; planetary, regional, and local ecosystems; environmental maintenance and despoilation. This is a divisible year course that can be entered in either semester. Lectures are given jointly with Columbia College, Geography C1005x, C1006y. MR. MANNERS and MR. OLIVER. Lec. Tu 12. Th 12. Lab. M 2:10-5, W 2:10-5, Th 2:10-5.

GEOLOGY AND GEOGRAPHY

3. Agricultural Development and Agrarian Societies. [8]

An ecologic and economic approach to the study of world agricultural geography. The role of agriculture in economic growth, technological and institutional innovation, agrarian reform, population change and migration, food production and world biomes. The agricultural systems of developed and underdeveloped nations. PROFESSOR ZOBLER. Tu Th 11.

4. Ecology of Urban-Industrial Society. [8]

The geographic and technologic correlates of urban-industrial society. The restructuring of an agrarian economy under the impact of the industrializing process. Rural-urban population flows, raw material inputs, manufactural and transport patterns, regional growth and world urbanization, city structure and central place systems, and environmental change viewed as elements in an industrial ecosystem. Metropolitan area planning in developed and emerging nations examined as case studies. PROFESSOR ZOBLER. Tu Th 11.

[W4011x. Pedology and Soil Resources. PROFESSOR ZOBLER.
Not given in 1969-70.]

W4012x. Hydrology and Water Resources.

Introduction to surface and ground water movement emphasizing principles and instrumentation for hydrologic cycle analysis and its application to water management. Consideration of political-administrative and economic-engineering factors in the planning of metropolitan area, rural-agricultural, and river basin systems. Two one-day field trips are required. Offered alternately with W4011x. PROFESSOR ZOBLER. Tu Th 2:10-3.

W4013y. Conservation Theory and Environmental Management.

Ecologic factors in conservation theory and the management of natural resources on a single, multiple, or areal basis. The allocation and use of fund, flow, and ambient resources. Man-environment relations in open space and metropolitan area planning. Two one-day field trips are required. PROFESSOR ZOBLER. Tu Th 2:10-3.

C3002x. Principles of Economic Geography.

A systematic analysis of the distribution of resources, industries and population in relation to physical, economic, technological and other factors. Resource-use planning and the principles of economic location and regional development. MR. GREENBERG. M W 11-12:15.

W4018y. Cartography.

The use of maps for illustrative and statistical purposes, as point, line, and area symbols, and for geographic analysis. A survey of photogrammetry and remote sensing and of modern map production methods. Experience in cartographic drafting, compilation, design, and evaluation. Use of aerial photographs in mapping and as map supplements. Lab. fee: \$5. PROFESSOR Lec. F 1:10. Lab. F 2:10-4.

W3101y. Anglo-America.

A systematic and regional analysis of the physical and human geography of Anglo-America. Emphasis will be placed on factors stimulating change in the spatial patterns of the area. MR. GREENBERG. M W 2:40-3:55.

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W3102y. Economic Geography of Canada and the State of Alaska.
PROFESSOR OTTE.

[C3200y. Economic Geography of Latin America. PROFESSOR WEBB.
Not given in 1969-70.]

C3040y. Urban Geography.

Distribution of cities, urban functions, internal forms and patterns, urban expansion and the rural-urban fringe, problems of classification.
MRS. MACOMBER. M W F 10.

[W3500x. African Problems and Potentialities. PROFESSOR HANCE.
Not given in 1969-70.]

W4025y. General Climatology.

Introduction to the physical processes of the atmosphere and their application to studies in regional and applied climatology. Laboratory work: analysis of climatic data. MR. OLIVER. Tu 4:10-6.

59, 60. Seminar in Geography and Conservation. [0]

Readings, discussions, and reports on various topics from the research literature. Preparation of the senior essay. Required of senior majors.
PROFESSOR ZOBLE. Hours to be arranged.

COLUMBIA COURSES

The following graduate courses are offered to qualified students with the permission of the Barnard chairman.

G4201x. Latin America.

G4401x. Economic Geography of the USSR.

G4501x. African Economic Geography.

G4022y. Location Theory.

G4023x. Regional Economic Analysis.

G4030x. Cultural Geography.

G4050x. Population Geography.

G4071x-4072y. Quantitative Methods in Geography.

GEOLOGY

1. Physical Geology.

[2]

The composition and structure of the earth, the internal and external forces acting upon it, and the surface features resulting. Laboratory includes study of common rocks and minerals, of contour maps as means of depicting the earth's morphology, and of geologic maps to infer the subsurface structure of the earth's crust, and two field trips to local geologic features. Course 1 makes a good unit for students taking other sciences and wishing to gain some knowledge of the content of geology.

GEOLOGY AND GEOGRAPHY

With Course 2 it satisfies the laboratory science requirement. Students who have had Geography 2 should not take Geology 1. PROFESSOR SANDERS and staff. Lec. M W F 10; W 4:10, voluntary review session. Lab. (2 hours) M 3:10-5; Tu 9-10:50; 3:35-5:25; W 2:10-4; Th 8:35-10:25, 2:10-4.

2. Historical Geology.

[2]

The history of the earth and of the life upon it from the beginning to modern times. The laboratory and assigned work include study of invertebrate fossils and of geologic maps and structures, museum trips, short field trips, and a required one-day field trip. Prerequisite: Course 1. PROFESSOR SANDERS and staff. Lec. M W F 10; W 4:10, voluntary review session. Lab. (2 hours) M 3:10-5; Tu 9-10:50, 3:35-5:25; W 2:10-4; Th 8:35-10:25, 2:10-4.

W3045y. Elements of Structural Geology.

Training in the recognition and interpretation of geologic structures both in the field and on geological and topographical maps. Prerequisite: Course 1 and W3113. PROFESSOR DALZIEL. M W 9. Lab. W 1:10-4.

W4327x. Principles of Geomorphology.

Lectures, map study, and readings on geomorphic principles. The origin of surface features of the earth as controlled by the interaction between geologic structures and erosional processes. Prerequisite: one year of geology. PROFESSOR FAIRBRIDGE. M W F 1:10. Lab. W 3:10-5.

W3113x. Elements of Mineralogy and Crystallography—Nonsilicates and Ore Minerals.

Crystallography, including principles of symmetry, internal structure of crystals, coordination, bonding, and external crystal form. Physical properties, occurrence, mode of origin, and the economic and geologic significance of the ore minerals and the nonsilicates of economic or geologic importance. Application of physical properties and chemical tests in the recognition of minerals. Given in sequence with Geology W4112. Prerequisite: Geology 1, 2 and elementary college physics, and chemistry, or permission of instructor. PROFESSOR HOLMES. Tu Th 11. Lab. Tu 1:10-4.

W4112y. Mineralogy of the Silicates and Rock-Forming Minerals.

Physical properties, occurrence, mode of origin and the more important and other geologic significance of the rock-forming minerals. Application of physical properties and chemical tests in recognition of minerals. Given in sequence with Geology W3113. Prerequisite: Course 1, W3113, elementary physics and chemistry, or permission of instructor. PROFESSOR HOLMES. Tu Th 11. Lab. Tu 1:10-4.

W4120y. Analytical Mineralogic Techniques.

Analytical methods for mineral identification and study, including the polarizing petrographic microscope, the reflecting polarizing microscope, x-ray diffraction (both powder and single crystal methods), x-ray fluorescence, and differential thermal analysis. Prerequisite: Course W3113 and W4112 or equivalent. PROFESSOR HOLMES. Tu Th 10. Lab. Th 1:10-3.

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W4661x. Introduction to Paleontology.

A systematic survey of the morphology, ecology, taxonomy, and geologic history of groups of invertebrate animals commonly found as fossils. Prerequisite: Courses 1 and 2. PROFESSORS BATTEN and HAYS. Lec. M W 11. Lab. F 2:10-4.

W4226y. Experimental Marine Sedimentology.

Training in theory and techniques of modern marine sedimentology, especially the chemical processes associated with deposition and diagenesis. Prerequisite: Course W3113, W4112, W4661, and chemistry. Expenses: \$10. PROFESSOR SANDERS. Lec. W F 1:10. Lab. W 2:10-4.

[W4053x. Geology of the New York Region.

PROFESSOR FAIRBRIDGE and assistants. Given in alternate years; not given in 1969-70.]

W4076y. Geologic Mapping.

The technique of geological mapping in an area with moderately complicated structure. Training in observation and reasoning from field data, and methods of recording results on topographical maps and air photographs, in notebook entries, cross sections, and diagrams. In 1970 the course will be conducted near Stroudsburg, Pa. Prerequisite: Course W3045 or equivalent, and the instructor's permission. Estimated expense: about \$100. PROFESSOR FAIRBRIDGE.

W4701x. Introduction to Petrology.

The classification and genesis of igneous, sedimentary, and metamorphic rocks. The major rock types will be examined in hand specimens and under the microscope. Prerequisite: elementary knowledge of physics and chemistry. W F 12. Lab. two hours to be arranged.

W4927x. Physical and Chemical Oceanography I.

Properties of sea water; water masses and their distribution; sea-air interaction influence on the ocean structure; basic oceanic circulation pattern; relation of diffusion and advection with respect to distribution of ocean elements; measurement techniques and methods of data processing and analysis. PROFESSORS GORDON and BROECKER. Lec. & Lab. Tu Th 6:30-8 p.m.

60. Seminar in Geology.

[0]

A seminar course with discussions, problems, and readings on various problems in geology. Prerequisite: a year of geology. Required of senior majors. PROFESSOR SANDERS. Hours to be arranged.

COLUMBIA COURSES

The following graduate courses are open to qualified students with the permission of the Barnard chairman:

W4030x. Pleistocene Geology.

W4941x. Introduction to Geophysics.

G 4883x. Principles of Geochemistry.

W4501x. Introductory Economic Geology.

TK4802 (Teachers College). Coastal Oceanography.

GERMAN

ASSOCIATE PROFESSOR: BRIGITTE L. BRADLEY (Chairman; 127 Milbank Hall)

ASSISTANT PROFESSOR: GERTRUD SAKRAWA

INSTRUCTORS: PAUL MARAMALDI, PETER D. G. BROWN

The courses in the German Department are designed to develop proficiency in all the language skills, to present the German cultural and literary tradition in its European context, and to study the works of important German, Austrian, and Swiss writers. The literature courses taught in German are open to all students whose knowledge of the language is sufficiently advanced. For students who do not know German or who have only a reading knowledge of German, the department offers a series of courses conducted in English.

A student majoring in German will aim at fluency in the language and at a fundamental understanding of the intellectual currents and literary developments in the German speaking countries. In consultation with her major adviser she will take seven literature courses and one seminar. Courses in other literatures, philosophy, history, art history, or music are recommended. Students interested in a major in German are urged to consult with the department as early as possible to work out an accelerated language program.

The major examination consists of a three-hour written section (in English) and of an individual oral exam of a half hour (in German). The senior essay (Course 62) will replace the written section.

Students who elect German as part of a Joint Program in Literature will work out their special program in consultation with the departments concerned.

FOREIGN LANGUAGE REQUIREMENT FOR THE DEGREE: All new students who have had prior training in German and who intend to satisfy the foreign language requirement in German must take a placement examination before registration. Students receiving a sufficiently high grade will automatically fulfill the requirement. All others may do so by completing Courses 11 and 10; or Courses 5, 6 or Course 5 alone with a minimum grade of B+.

LANGUAGE COURSES

- 1-2. Elementary Full-Year Course. [15]
- Elements of grammar, easy reading, written and oral practice. PROFESSOR BRADLEY, MR. MARAMALDI, and Section I M W F 9. Section II M W F 11. Section III M W F 12:10. Required oral sections may be chosen as follows: Section I Tu Th 9. Section II Tu Th 11. Section III Tu Th 2:10.

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- 1y. Elementary Full-Year Course. Part I.** [4]
Same as Course 1, but given in the Spring Term. M W F
1:10, Tu Th 11.
- 2x. Elementary Full-Year Course. Part II.** [4]
Same as Course 2, but given in the Autumn Term. MR. BROWN. M
W F 1:10, Tu Th 11.
- 3, 4. Intermediate Course.** [15]
Reading and discussion of works by representative modern authors.
Grammar review. Prerequisite: Course 1-2 or a satisfactory grade on
the placement examination. PROFESSOR SAKRAWA and MR. MARAMALDI.
Section I M W F 11. Section II M W F 12:10.
- 3y. Intermediate Course.** [4]
Same as Course 3, but given in the Spring Term. MR. BROWN. M W
F 1:10.
- 4x. Intermediate Course.** [2]
Same as Course 4, but given in the Autumn Term. MR. MARAMALDI.
M W F 10.
- 7y. Advanced Oral Practice.** [0]
Pronunciation and intonation based on selected readings such as radio
plays. Topical discussions. Improvised conversations. PROFESSOR
BRADLEY. M W F 1:10.
- [10. Advanced Composition.** Not given in 1969-70.]
- 11. Readings: Radical Changes in Modern Thought.** [5]
Selected readings of such writers as Marx, Nietzsche, Freud, and
recent thinkers who have made significant contributions to contempo-
rary life. Prerequisite: a reading knowledge of German, intermediate
level. Classes conducted in English. MR. BROWN. M W F 2:10.

LITERATURE COURSES

For nonmajors, courses marked thus § will count toward the general college requirement. All courses are conducted in German except Courses 32, 55, and 56.

- 5, 6. Introduction to the Study of German Literature.** [15]
Intensive reading and discussion of significant works of the nineteenth and the twentieth century. Practice in literary analysis in German. Prerequisite: Course 4 or a satisfactory grade on the placement examination. PROFESSOR BRADLEY and MR. BROWN. Autumn Term: Section I M W F 10. Section II M W F 11. Spring Term: M W F 11.
- 5y. Introduction to the Study of German Literature. Part I.** [2]
The equivalent of Course 5 but given in the Spring Term. Prerequisite: Course 4 or permission of the department. MR. MARAMALDI. M W F 10.

- §15. Goethe and Schiller.** [9]
An introduction to their major works. Lectures and discussions. PROFESSOR SAKRAWA. Tu Th 2:10-3:25.
- §16. German Romanticism.** [6]
The Romantic Movement in Germany and its influence abroad. Aesthetic theories and selected works by leading Romanticists: e.g. the Schlegel Brothers, Novalis, Brentano, E.T.A. Hoffmann, Heine, and others. Lectures and discussions. PROFESSOR SAKRAWA. Tu Th 9:10-10:25.
- [§25. German Drama in the Nineteenth Century. Not given in 1969-70.]
- §26. Modern German Theater.** [5]
The innovations of the Expressionists, Brecht's new departures, documentary theater, and the experiments of present day playwrights. PROFESSOR BRADLEY. M W F 2:10.
- [§27. The German Novel from Goethe to Thomas Mann.
PROFESSOR SAKRAWA. Not given in 1969-70.]
- [§28. Modern German Prose Fiction. PROFESSOR BRADLEY.
Not given in 1969-70.]
- §32. German Poetry in Our Century.** [7]
A study of significant works and major trends. Emphasis on changes in style and thought; from the creation of a poetic universe to poems of social protest. Rilke, Benn, Brecht, Bachmann, Grass. Prerequisite: a reading knowledge of German. Lectures and discussions in English. PROFESSOR BRADLEY. Tu Th 10:35-11:50.
- [§36. Goethe's Faust. Not given in 1969-70.]
- [§45. German Literature from the Earliest Times through the Middle Ages. PROFESSOR BRADLEY. Not given in 1969-70.]
- [§46. German Literature in the Seventeenth and Eighteenth Centuries.
MR. MARAMALDI. Not given in 1969-70.]
- 61. Grillparzer.** [0]
Seminar required of all majors. Open to other qualified students by permission of the department. A study of the great Austrian dramatist's work and of the Viennese Theater in his time. Term paper. PROFESSOR SAKRAWA. Tu Th 10:35-11:50.
- 62. Senior Essay.** [0]
Senior essay, based on the work of Course 61 or on individual research. Regular consultations with the instructor at hours to be arranged.
- 55y. Masterpieces of German Literature in Translation.** [9]
From the Age of Chivalry to the early twentieth century. Among the works and authors to be read: *Parzival*, *Simplicissimus*, Lessing, Schiller, Goethe, Buchner, Thomas Mann. A knowledge of German is not required. MR. MARAMALDI. Tu Th 2:10-3:35.

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- 56. German Literature in Translation: The Search for Identity. [9]**
Fiction and plays by authors who have had a decisive impact on our times. Writers to be concentrated on: Hesse, Kafka, Musil, Grass, Durrenmatt, and others. A knowledge of German is not required. **MR. BROWN.** Tu Th 2:10-3:35.

COLUMBIA COLLEGE

- C3673x. German Poetry from Goethe to Nietzsche.**
Analysis of poems by Klopstock, Goethe, Schiller, Holderlin, Heine, the Romantic poets, Morike, and Nietzsche. **PROFESSOR BAUKE.**

POLITICAL SCIENCE

- PROFESSOR: DEMETRIOS CARALEY (Chairman; 409 Lehman)
- ASSOCIATE PROFESSORS: PETER H. JUVILER (Acting Chairman for Spring 1969; 407 Lehman) DAVID A. KAY,
- ASSISTANT PROFESSORS: JOHN T. ELLIFF, CATHERINE KELLEHER
- LECTURERS: STUART FAGAN, ANNETTE B. FOX
- INSTRUCTORS: BRUCE FELD, ETHEL SHEFFER (Part-time)
- OFFICERS FROM OTHER FACULTIES OF COLUMBIA UNIVERSITY OFFERING COURSES LISTED IN THIS CATALOGUE:
 - PROFESSORS: CHARLES V. HAMILTON, HARVEY C. MANSFIELD,

The purpose of the study of political science is to develop understanding of the basic political institutions and processes in human society. This understanding involves analysis and evaluation of political systems in the context of the challenges they face and the changes they undergo. The major is designed to equip the student to play an effective role as citizen in a democratic political order, to participate more actively in political life as civil servant, public or party official, lawyer, or political commentator, or to undertake graduate training in political science in preparation for a career in college teaching.

A student majoring in political science is required to take a minimum of nine semester-courses in the department, including Course 1, 2, 45, and a senior research seminar. A student majoring in urban studies with a concentration in political science is required to take a minimum of six semester courses including Course 1, 3313, senior research seminar, and two from among: 26, 28, 30, V3407. In order to explore more adequately the techniques of scholarly investigation and to have the opportunity of independent specialized work, both majors and concentrators write a senior essay as part of the work for the senior research seminar (either 61-62 or V3711x-3712y).

The department's requirements are flexibly drawn so as to permit a major in consultation with her adviser to plan an overall program that, while providing some background in various areas of government and politics, can place special emphasis on such particular interests as the American political system (including its urban subsystem), foreign political systems, international relations, or political thought.

Other social sciences: In view of the essential unity of the social sciences, students majoring in political science are urged to take at least three courses from among the following departments as selected in conference with the adviser: anthropology, economics, history, sociology.

GENERAL COURSES

Courses listed under this heading may be taken without previous study of political science.

BARNARD COLLEGE

- 1, 2. Contemporary Political Systems.** [3]
Analysis of traditions, structures, processes, and problems of contemporary political systems. Autumn Term: The American system of politics. Spring Term: Political systems of selected foreign countries. Course may be entered in either semester. Autumn Term: PROFESSOR ELLIFF and OTHER MEMBERS OF THE DEPARTMENT. Spring Term: PROFESSOR JUVILER and OTHER MEMBERS OF THE DEPARTMENT. Lec. M W 11. Conference hours: W 12:10, 1:10; Th 2:10, 3:10; F 9, 10, 11. Sign-up sheets for conference hours are posted outside 415 Lehman.
- 4. Freshman Seminar in Government.** [0]
Intensive study of a topic to be selected by the instructor. The aim of the course is to acquaint students with the methods and sources of political science and to provide experience in discussion and writing. Topic for Spring 1970 to be announced in December. PROFESSOR FELD. W 9:10-11.
- 7. Modern Political Movements.** [7]
A tentative inquiry into the roles of deviance and dissent in organized society, and the types of political movements; selective case studies of movements such as anarchism, Marxism, fascism and movements of racial or ethnic self-assertion. PROFESSOR JUVILER. Tu Th 10:35-11:50.
- V3313y. American Urban Politics.** [3]
Patterns of government and politics in America's large cities and suburbs. Analysis of the influence of party leaders, local officials, social and economic notables, racial, ethnic and other interest groups, the press, the general public, and the federal and state governments. The impact of urban governments on ghetto and other urban conditions. PROFESSOR CARALEY. M 11-12, W 11-12:30.
- 11. International Politics.** [5]
An exploration of the basic setting and dynamics of global politics, with emphasis on contemporary problems and processes. Open to freshmen only with permission of the instructor. PROFESSOR KELLEHER. M W 2:10-3:25.
- 12. International Organization.** [9]
Regional, functional and universal international organizations both as components of the international political system and as forces for change. PROFESSOR KAY. M W 2:10-3:25.
- 13, 14. Political Theory.** [6]
Analysis of major political writings from Plato to the present. Emphasis is on a comparison of basic ideas and concepts. Autumn Term: Spring Term: MRS. SHEFFER. T Th 9:10-10:25.

SPECIALIZED COURSES

- [15. The Making of American Foreign and Military Policy.**
Not given in 1969-70.]
- 18. The Politics of European Security.** [7]
Analysis of the basic political, military, and economic factors which have shaped the European framework since 1945. Emphasis on the patterns of conflict and cooperation between Eastern and Western

POLITICAL SCIENCE

Europe, on the continuing problem of superpower involvement and control, and on the issues clouding the German question. Prerequisite: Course 2, 11, or permission of the instructor. PROFESSOR KELLEHER. Tu Th 10:35-11:50.

- 19. Soviet Politics.** [9]
Continuity and change in the Soviet system. The role of the Communist Party in theory and practice as society modernizes. Policy-making and the interaction of elites, mass occupational groups, situation. Signs of convergence or non-convergence with other systems in ideology, political participation, priorities of policy, intellectual life, socio-economic development, security and stability. Prerequisite: Political Science 2, History 28, or permission of the instructor. PROFESSOR JUVILER. Tu Th 2:10-3:25.
- 20. Colloquium on Communism and Revolutionary Change.** [0]
The colloquium will trace the development of Communist and other revolutionary movements in the twentieth century; consider the questions raised by theoretical and reflective works, on revolution; select, and study causes, nature, and consequences of, some recent or contemporary revolutions and counterrevolutions. Reading, discussion, oral and written report. Prerequisite: Course 2, 7, 19 or permission of the instructor. PROFESSOR JUVILER. Th 2:10-4.
- [21. Colloquium on Soviet Foreign Policy. PROFESSOR JUVILER.**
Not given in 1969-70.]
- 23. African Political Systems.** [2]
Comparative analysis of selected African political systems, with emphasis on the problems of development and modernization. Prerequisite: Course 2 or permission of the instructor. M W F 10.
- 24. Asian Political Systems.** [2]
Comparative analysis of Asian political systems, with particular attention to China and India. Prerequisite: Course 2 or permission of the instructor. M W F 10.
- 25. The Judicial Process.** [6]
Analysis of the process of judicial decision-making and the role of courts and judges in the American political system. Prerequisite: Course 1 or permission of the instructor. PROFESSOR ELLIFF. Tu Th 9:10-10:25.
- 26. Problems in Civil Rights and Liberties.** [6]
Analysis of the political and legal context for current issues in freedom of speech and religion, racial discrimination, the right to privacy, and criminal law enforcement. Prerequisite: Course 1. PROFESSOR ELLIFF. Tu Th 9:10-10:25.
- 27. Colloquium on Party Politics and Issues.** [5]
The bases of individual political behavior; the origins, structure, and functions of the American party system; and the content of recent party politics. Prerequisite: Course 1 and permission of the instructor. PROFESSOR FELD. W 2:10-4.

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28. Colloquium on Congressional Politics. [5]

The interrelations of structure, process and policy output in the American Congress, including the legislative role of the President. First-hand examination of hearings, reports, debates and voting patterns, and preparation during reading period of case studies on individual bills. Prerequisite: Course 1 and permission of the instructor. W 2:10-4.

30. Bureaucratic Power in American Politics. [5]

An analysis of the politics of the administrative process at the federal and urban governmental levels, including the policy-making roles of executive branch actors and their relations with each other, external actors and clienteles. PROFESSOR FELD. M W 2:10-3:25.

31. American Political Thought. [5]

An analysis of ideas, beliefs and doctrines underlying American democracy. With emphasis on the Revolutionary period, the Progressive era, and the present time. Prerequisite: Course 1 or permission of the instructor. MRS. SHEFFER. Tu Th 9:10-10:25.

V3407y. Colloquium on Urban Black and Minority Politics.

Comparative analysis of the politicization of urban ethnic groups, with emphasis on the emerging political patterns and problems of black urban communities. Prerequisite: Course 1 or V3313y and junior standing, sign up on bulletin board, 408 Lehman. PROFESSOR HAMILTON. Th 10:00-11:50.

COURSES FOR MAJORS ONLY

45x or y. Junior Colloquium on Concepts and Methods. [0]

Analysis and application to case studies of selected basic methodological approaches in modern political science. All juniors majoring in political science must sign up for the section of their choice, space permitting, during spring registration on sheets posted on the department bulletin board. Autumn Term: PROFESSOR KELLEHER and others. Autumn Term: M or Th 2:10-4. Spring Term: Tu or Th 2:10-4.

V3711x-V3712y. Senior Research Seminar in American Politics.

Discussions, conferences, and the writing of a senior essay on selected topics of American public policy and politics. Section II concentrates on urban topics at the local and national level.

Section I	PROFESSOR MANSFIELD.	Th 4:10-6.
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Section II	PROFESSOR CARALEY.	W 4:10-6.
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Note: Admission to section I requires the permission of the Barnard chairman.

61-62. Senior Research Seminar. [0]

Discussions and conferences on the researching and writing of the senior essay.

Section I	(replaced by V3711x-V3712y).
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Section II	PROFESSOR ELLIFF.	Tu 4:10-6.
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Section III	PROFESSOR JUVILER.	Th 4:10-6.
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POLITICAL SCIENCE

Section IV	PROFESSOR FOX.	W 4:10-6.
Section V	PROFESSORS FOX and KELLEHER.	Th 4:10-6.
Section VI	PROFESSOR KAY.	Th 4:10-6.
Section VII	PROFESSOR FELD.	W 4:10-6.

Note: Section sizes are limited. Majors should sign up if possible directly with the appropriate instructor before the end of their junior year.

GRADUATE COURSES

Certain graduate courses given in the University are open to qualified majors with the consent of the department and the major adviser. These courses are described in the Announcement of the Graduate Faculties. Attention is drawn to the following:

G4461x, G4462y. Latin American Political Institutions and Behavior.

PROFESSORS CHALMERS and SCHNEIDER. W 4:10-6.

G4472y. Political Institutions of Japan. PROFESSOR STESLICHE. Tu 10-11:50.

G8202y. Colloquium on Congress.

PROFESSOR CARALEY. M 2:10-4.

GREEK AND LATIN

PROFESSOR: HELEN H. BACON (Chairman; 317 Milbank Hall)

ASSISTANT PROFESSOR: LYDIA H. LENAGHAN

INSTRUCTORS: JOHN C. ALEXANDER (Part-time), ANN CORNELL SHEFFIELD

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSOR: ²HOWARD N. PORTER

ASSOCIATE PROFESSORS: COLEMAN H. BENEDICT, WILLIAM M. CALDER III, HENRY S. COMMAGER, JR., JAMES A. COULTER, LEONARDO TARAN

ASSISTANT PROFESSORS: PETER POUNCEY, SETH L. SCHEIN, ¹JOHN VAIO

PRECEPTOR: JOHN FINE

The general objectives toward which the work of the department is directed are a knowledge of the language, literature, and civilization of the ancient Greeks and Romans. The emphasis varies in accordance with the student's interests.

A major in Greek: Eight courses in Greek above the elementary course. These must include Greek V3319x-V3320y (counts as one course), and Greek V3371x-V3372y.

A major in Latin: Eight courses in Latin above the elementary course. These must include Latin V3319x-V3320y (counts as one course), and Latin V3371x-V3372y.

A major in Greek and Latin combined can be arranged for qualified students on consultation with the major adviser.

Other fields: Courses in ancient art, archaeology, history, philosophy, other languages, and linguistics are strongly recommended.

The major examination at the end of the senior year consists of one three-hour examination which will test the student's understanding of style and language, and her ability to read aloud both prose and verse.

Barnard College participates in the program of the Intercollegiate Center for Classical Studies in Rome. Greek and Latin majors who have completed at least four semesters of Latin above the elementary course, and at least one semester of elementary Greek, are eligible to apply for admission to the program of the Rome Center for one or two semesters, preferably in the junior year. Courses taken at the Rome Center can be counted toward the major and, in some cases, toward the fulfillment of the general requirements.

¹ Absent on leave, 1969-70.

² Absent on leave, Spring Term.

GREEK AND LATIN

Barnard College is a Supporting Institution of the American School of Classical Studies at Athens and the American Academy in Rome, and certain privileges of those schools are open, without fee, to graduates of the College.

FOREIGN LANGUAGE REQUIREMENT FOR THE DEGREE: Students may fulfill the foreign language requirement in Greek or Latin either by completing Greek 11, 12 or Latin V3011x, V3012y, or by completing any one of the above courses with a minimum grade of B+, or by passing an exemption examination with a sufficiently high grade. This examination tests the student's knowledge of grammar and her ability to translate written Greek or Latin.

CLASSICS IN TRANSLATION

Classical Literature 35. The Ancient Novel. [4]

Satiric and romantic prose fiction and its antecedents. The novels of Petronius, Longus, Apuleius and others will be studied in relation to the art of such story-tellers as Homer, Herodotus, and Livy. PROFESSOR BACON. M W F 1:10.

Classical Literature 32. Classical Myth. [4]

Classical myths in such authors as Hesiod and Ovid. PROFESSOR LENAGHAN. M W F 1:10.

Classical Literature C3123x. Greek Drama and Its Influences.

The major Greek tragedies and comedies, and their influence on Roman and later European drama. Some attention is paid to the problems of the origin of Greek drama, the production of plays, and the dramatic criticism of Aristotle. MISS SHEFFIELD. M W F 11.

Classical Literature C3124y. Roman Literature.

A study, through translations, of the major literary works in the fields of epic, history, oratory, lyric and elegy, philosophy, and satire. Some attention is given to the historical development of Roman literature. A term paper is required. PROFESSOR POUNCEY. M W F 10.

GREEK LANGUAGE AND LITERATURE

For nonmajors, courses marked thus § will count toward the general college requirement.

1-2. Elementary Full-Year Course. [5]

Grammar, composition, and reading. Course 1 is prerequisite to Course 2. PROFESSOR BACON. M Tu W F 2.

§11. Prose and Poetry. [2]

Selections from Lysias, Herodotus, and elegy. Prerequisite: Course 1-2, or the equivalent. MISS SHEFFIELD. M W F 10.

§12. Selections from Homer. [2]

Prerequisite: Course 11 or permission of the instructor. MISS SHEFFIELD. M W F 10.

[§V3305x. Tragedy.

PROFESSOR PORTER.

Not given in 1969-70.]

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[§V3306y. Historians.

PROFESSOR TARAN.

Not given in 1969-70.]

§V3307x. Comedy.

Selections from Aristophanes; studies in the origin and development of Greek comedy. Prerequisite: Course 12, or the equivalent. Given every other year in alternation with Course V3305x. PROFESSOR TARAN. M W 10-11:25.

§V3308y. Philosophy.

Selected dialogues of Plato. Prerequisite: Course 12, or the equivalent. Given every other year in alternation with Course V3306y. PROFESSOR COULTER. M W F 1:10.

§V3309x. Selections from Greek Literature, I.

Aristotle's *Nicomachean Ethics*, Bks. 1-3 and 10; a comparison of the detailed argument of the early books with the wider ethical ideal of Book 10. Prerequisite: Course 12 or the equivalent. PROFESSOR POUNCEY. Tu Th 4:10-5:25.

§V3310y. Selections from Greek Literature, II.

Euripides: *Orestes and Bacchae*. Prerequisite: Course 12 or the equivalent. PROFESSOR SCHEIN. Tu Th 5:10-6:25.

[V1109x-V1110y. Prose Composition, I.

MR. POUNCEY.

Not given in 1969-70.]

¹V3319x-V3320y. Prose Composition, II.

The writing of sentences and connected passages in Greek. Prerequisite: at least four terms, or the equivalent, of Greek. PROFESSOR SCHEIN. Th 1:10-3.

[3371x-V3372y. Major Seminar.

PROFESSOR COULTER.

Not given in 1969-70.]

LATIN LANGUAGE AND LITERATURE

For nonmajors, courses marked thus § will count toward the general college requirement.

1-2. Elementary Full-Year Course.

[5]

Grammar, composition, and reading. Course 1 is prerequisite to Course 2. PROFESSOR LENAGHAN. M Tu W F 2:10.

3. Cicero: Selections.

[3]

Prerequisite: Course 1-2 or the equivalent. MISS SHEFFIELD. M W F 2:10.

4. Vergil: Selections from the Aeneid.

[3]

Prerequisite: Course 3 or the equivalent. MISS SHEFFIELD. M W F 2:10.

¹ This is a two-point Columbia course. A Barnard student must take both terms to receive one course credit.

GREEK AND LATIN

§V3011x. Myth and Pastoral.

Selections from Livy; Vergil's *Eclogues*. Prerequisite: Course 4 or the equivalent. PROFESSOR BENEDICT, PROFESSOR LENAGHAN,
Section I M W F 10 (Columbia students). Section II M W F 1:10
(Barnard students). Section III Tu Th 3:10-4:25 (Columbia students).

Note: Sections I and III are open to Barnard College students with permission of the department chairman.

§V3012y. Lyric Poetry.

Selections from Catullus and Horace. Prerequisite: Course V3011x or the equivalent. PROFESSOR, MISS SHEFFIELD, PROFESSOR COMMAGER. Section I M W F 10 (Columbia students). Section II M W F 1:10 (Barnard students). Section III Tu Th 5:10-6:25 (Columbia students).

Note: Sections I and III are open to Barnard College students with permission of the department chairman.

Latin 33. Medieval Literature.

[3]

Representative writings and genres in relation to their classical models. Prerequisite: Permission of the instructor. PROFESSOR LENAGHAN. M W F 11.

[§V3305x. Historians.

PROFESSOR BENEDICT.

Not given in 1969-70.]

[§V3306y. Satire.

PROFESSOR COMMAGER.

Not given in 1969-70.]

§V3307x. Elegiac Poetry.

Selections from Tibullus, Propertius, and Ovid. Prerequisite: Course V3012y, or the equivalent. Given every other year in alternation with Course V3305x. PROFESSOR COMMAGER. Tu Th 4:10-5:25.

§V3308y. Philosophy.

Selections from Lucretius; some attention is given to the Hellenistic background of Roman philosophy and to the philosophic writings of Cicero and Seneca. Prerequisite: Course V3012y or the equivalent. Given every other year in alternation with Course V3306y. PROFESSOR BENEDICT. M W F 11.

§V3309x. Selections from Latin Literature, I.

Prerequisite: Course V3012y or the equivalent. M W
3:10-4:25.

§V3310y. Selections from Latin Literature, II.

Prerequisite: Course V3012y or the equivalent. M W F
1:10-2.

¹V1109x-V1110y. Prose Composition, I.

A review of Latin grammar and syntax. Prerequisite: Course 1-2 or the equivalent. MR. FINE. Tu 2:10-4.

¹ This is a two-point Columbia course. A Barnard student must take both terms to receive one course credit.

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¹V3319x-V3320y. Prose Composition, II.

The writing of sentences and connected passages in Latin. Prerequisite: at least four terms, or the equivalent, of Latin. Th 1:10-3.

[V3371x-V3372y. Major Seminar.

PROFESSOR LENAGHAN.

Not given in 1969-70.]

GRADUATE COURSES

Graduate courses given at Columbia University are open with the consent of the department and the major adviser to qualified majors. Their description may be found in the Announcement of the Graduate Faculties.

MODERN GREEK LANGUAGE AND LITERATURE

1-2. Elementary Full-Year Course. [13]

Introduction to written and spoken *demotike*. Intensive study of grammar with illustrative readings of representative texts. Conversation and written exercises in *demotike*. MR. ALEXANDER. M Th 6:10-8.

3. Modern Greek Literature. [13]

Rapid review of grammar. Survey readings in *demotike*. Conversation and written exercises. Prerequisite: Course 1-2 or the equivalent, or permission of the instructor. MR. ALEXANDER. M W 4:10-5:35.

4. Modern Greek Literature. [13]

Introduction to the elements of *katharevousa*. Survey readings in *demotike* and *katharevousa* with attention also to historical texts. Conversation and written exercises. Prerequisite: Modern Greek 3, or permission of the instructor. MR. ALEXANDER. M W 4:10-5:35.

¹ This is a two-point Columbia course. A Barnard student must take both terms to receive one course credit.

HISTORY

PROFESSORS: BASIL RAUCH (Chairman; 420 Lehman), CHILTON WILLIAMSON

ASSOCIATE PROFESSORS: ANNETTE K. BAXTER, PATRICIA ALBJERG GRAHAM, STEPHEN KOSS, GEORGE WOODBRIDGE

ASSISTANT PROFESSOR: SUZANNE F. WEMPLE

LECTURER: PATRICIA H. LABALME

INSTRUCTORS: ANN FAGAN, ROBERT MCCAUGHEY

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES LISTED IN THIS CATALOGUE:

ASSISTANT PROFESSOR: IN-HO RYU

INSTRUCTOR: WILLIAM V. HARRIS

History, as knowledge of the past, touches on all aspects of human activity. It partakes at once of the scientific approach—acquaintance with documents and primary sources is indispensable—and of the imaginative qualities associated with the literary craft. The relevance of history lies in the eye of the beholder. History is the discipline best calculated to impart an appreciation of man's past achievements, a sense of continuity combined with an awareness of change and diversity. The basic issues that confront mankind have changed but little in historic times but their setting is forever changing.

The requirements for a major in history are eleven courses distributed as follows:

1. At least four courses in an area of concentration;
2. Four other courses. Of these not more than two may be taken in other departments provided (a) that such courses are closely related to the area of concentration, and (b) that the student has obtained the written permission of both her major adviser and the Chairman of the History Department;
3. One course of junior readings;
4. Two courses of senior seminar in connection with which the student is required to write a senior thesis.

While history majors normally specialize in European or American history, they may, upon approval of the chairman, specialize in such fields of particular interest as classical civilization, Jewish history, cultural history, Oriental studies, African studies, or urban history.

Joint majors: A student who wishes to combine studies in history with studies in some other discipline should draw up a proposal and present it to the chairmen of the departments concerned for advice and approval.

BARNARD COLLEGE

The colloquia are discussion courses in which limited periods or aspects of history are studied. Admission to a colloquium is by permission of the instructor. The senior seminars are normally restricted to history majors. All other courses are mainly lecture courses dealing with particular periods, countries, or topics.

All Barnard history courses (except junior readings and senior seminars) are open to all Barnard students, including freshmen. Barnard students may without obtaining any signature take Columbia College courses in the 3000 or lower levels, except courses requiring special permission for entry.

The attention of history majors is called to the fact that a number of history courses offered in Columbia College, General Studies and the Graduate School are available to them. Students are therefore urged to consult the appropriate catalogues in making out their programs, taking care to acquaint themselves with the conditions for admission to courses other than those listed in the Barnard catalogue.

C1105x. The Greek World.

From the collapse of Mycenaean civilization and the Dorian invasions, through the development of classical Greece, to the death of Alexander the Great. MR. HARRIS. M W F 9.

C1106y. The Hellenistic and Roman Worlds.

The Hellenistic world; the rise of Rome and its triumph; the character of the Roman empire; the cause of its dissolution; the emergence from it of enduring cultural patterns. MR. HARRIS. M W F 9.

3. The Early High Middle Ages: from 300 to 1050. [7]

The fusion of Graeco-Roman, Judeo-Christian and Germanic traditions, and the emergence of Europe as a cultural unit. PROFESSOR WEMPLE. Tu Th 10:35-11:50.

4. The Middle Ages: from 1050 to 1450. [7]

The social environment, political institutions, church history, thought and science from the Gregorian Revolution to the Renaissance. PROFESSOR WEMPLE. Tu Th 10:35-11:50.

[5. The Roots of the Modern World: Western Europe, 1250-1494.

Colloquium.

PROFESSOR WEMPLE.

Not given in 1969-70.]

8. The Transformation of the Roman World: from Diocletian to Charlemagne. [0]

Colloquium.

The crisis in the third century and the late Roman regulatory state, Christianity and mystery religions, patristic thought and pagan philosophy, the shattering of the Mediterranean unity and the new European synthesis. PROFESSOR WEMPLE. W 4:10-6.

V1131x. Dante's World.

The historical background of Dante's political, theological and ethical thought, and a literary analysis of its poetical rendering. PROFESSORS LORCH and WEMPLE. Tu 3:35-5:25.

11. **Main Currents of the Modern European World: Renaissance to the French Revolution.** [5]
The forces—cultural, social, political, economic—which established modern Europe and brought it into contact with the rest of the world. MISS FAGAN. M W F 2.
12. **Main Currents of the Modern European World: Waterloo to Today.** [2] and [5]
Nineteenth-century industrial revolutions, romanticism, liberalism, nationalism, socialism, and imperialism and twentieth-century wars, revolutions, dictatorships, and aspirations. PROFESSOR WOODBRIDGE and MISS FAGAN. Section I M W F 10. Section II M W F 2.
13. **The Renaissance in Europe in the Fifteenth and Sixteenth Centuries.** [6]
Humanism as represented by such educators, princes, writers, and artists as Guarino da Verona, Pius II, Lorenzo de' Medici, Leon Battista Alberti, Machiavelli, Erasmus, and Thomas More. DR. LABALME. Tu Th 9:10-10:25.
14. **The Reformation in Europe in the Sixteenth Century.** [6]
The great reformers and religious changes: Luther, Calvin, Zwingli, the Anabaptists, Tudor reforms, and the Catholic Reformation. DR. LABALME. Tu Th 9:10-10:25.
- [17. **An Age of Conflict: Europe from 1815 to 1870.**
PROFESSOR WOODBRIDGE. Not given in 1969-70.]
- [18. **The Struggle for Mastery: Europe from 1870 to 1914.**
PROFESSOR WOODBRIDGE. Not given in 1969-70.]
19. **The Problems of Europe: 1914-1939.** [3]
The First World War and the ensuing settlements; the apparent liquidation of the war; the league; new political systems; and the collapse of the thirties. MISS FAGAN. M W F 11.
20. **The Second World War and the Recovery of Europe: 1939 to Today.** [3]
The Second World War and its legacy; the United Nations; rival groups and the Cold War; the new place of Europe in the world. MISS FAGAN. M W F 11.
21. **England under the Tudors and Stuarts: 1485 to 1714.** [9]
England's national monarchy from its establishment through its evolution by parliamentary agitation and civil war. Special attention to the effects of religious thought upon political development. PROFESSOR KOSS. Tu Th 2:10-3:25.
22. **Modern Britain: 1714 to Today.** [9]
The transformation of the society of Squire Western into that of Harold Wilson. Emphasis upon the rise of industrialism, its effects upon Britain's domestic and international situations, and the development of the welfare state. PROFESSOR KOSS. Tu Th 2:10-3:25.

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G6327x. The British Empire.

A survey of major developments from Tudor times to the American War of Independence. The emphasis will be placed upon the imperial factor in relation to Ireland, Asia, West Africa, the British West Indies. PROFESSOR WILLIAMSON. M W F 11.

G6328y. The British Empire-Commonwealth.

Major themes will consist of reform, expansion, anti-imperialism, the New Imperialism and the emergence of the Commonwealth since 1914. PROFESSOR WILLIAMSON. M W F 11.

25. The Establishment and Downfall of the French Monarchy: 1515 to 1789. [1]

The cultural, intellectual, political, social, and economic development that brought into existence the monarchy of Louis XIV and led to its collapse. PROFESSOR WOODBRIDGE. M W F 9.

26. France in Turmoil: 1789 to Today. [1]

The cultural, intellectual, political, social, and economic developments that have kept France in turmoil from the French Revolution to Charles de Gaulle. PROFESSOR WOODBRIDGE. M W F 9.

27. The Russian State and Society: Origins and Development, to 1801. [9]

State institutions and social structure in medieval and early modern Russia; the Kievan and Muscovite background and Imperial Russia from Peter the Great to the end of the eighteenth century. PROFESSOR RYU. Tu Th 2:10-3:25.

28. The Modernization of Russia: 1801 to Today. [9]

The last century of Imperial Russia, the Revolution, and the development of the Soviet Union. PROFESSOR RYU. Tu Th 2:10-3:25.

35. The French Revolution. [0]

Colloquium.
A detailed study of the causes and course of the French Revolution based to the greatest possible extent on the use of contemporary materials. Discussions and frequent short papers. PROFESSOR WOODBRIDGE. M 2:10-4.

45. The Life and Lifetime of Sir Winston Churchill. [0]

Colloquium.
Events in English and world history from 1874 to 1965, reflected in the writings, experiences, and career of the statesman whose lifetime and controversies spanned these nine decades. Prerequisite: permission of the instructor. PROFESSOR KOSS. Tu 3:35-5:25.

46. Europe in the Age of Tyrannies: 1914-1945. [0]

Colloquium.
A study of European society in the period of the second Thirty Years War, with emphasis on the tyrannies—political, economic, cultural and psychological—which prevailed upon men and nations. PROFESSOR KOSS. Tu 3:35-5:15.

51. American Civilization to the Civil War: A Survey. [2]

Foundations of American culture in the Colonial period; the Revolution and the New Nation; social and economic ideas and movements between the Constitution and the Civil War. DR. MCCAUGNEY. M W F 10.

- 52. American Civilization Since the Civil War: A Survey.** [2]
Industrialism, evolution, scientific scholarship, pragmatism and progressivism; their effects upon American writing, political thought, and religion, as the forerunners of the present age. DR. McCAUGHEY. M W F 10.
- 53. American Colonial Culture.** [7]
Origins of Colonial populations; economic, religious, social and intellectual aspects of Colonial life in the seventeenth and eighteenth centuries. PROFESSOR WILLIAMSON. Tu Th 10:35-11:50.
- 54. The American Revolution.** [7]
Early relations of the colonies and the Mother Country; development of British colonial policy and colonial political institutions; ripeness of the colonies for freedom; organization of resistance; the clash of ideas and arms; internal significance of the Revolution and its subsequent influence. PROFESSOR WILLIAMSON. Tu Th 10:35-11:50.
- [55. From the Federal Constitution to Jacksonian Democracy.**
PROFESSOR WILLIAMSON. Not given in 1969-70.]
- [56. Sectionalism, Civil War, and Reconstruction.**
PROFESSOR WILLIAMSON. Not given in 1969-70.]
- 57. Origins of Modern America: From Reconstruction to Progressivism.** [3]
The experiment of pro-Negro reconstruction; social Darwinism as the watershed between older America and modern America; the imperialist experiment; the progressivism of the Theodore Roosevelt era. DR. McCAUGHEY. M W F 11.
- 58. Achievements and Crises in Modern America: from Woodrow Wilson to Lyndon B. Johnson.** [3]
The formation of the welfare state; the crisis of puritanism in the twenties; economic and cultural radicalism in the thirties; antifascism and anticommunism; the civil rights movement and its dilemmas; the United States and world hegemony. DR. McCAUGHEY. M W F 11.
- [59. The Classical Age of American Diplomacy: 1775-1823.**
PROFESSOR RAUCH. Not given in 1969-70.]
- [60. American Diplomacy and Power: 1823 to Today.**
PROFESSOR RAUCH. Not given in 1969-70.]
- [61. Women in America: 1630-1890.**
PROFESSOR BAXTER. Not given in 1969-70.]
- [62. Women in America: 1890 to Today.**
PROFESSOR BAXTER. Not given in 1969-70.]
- 62y. History of Education in the United States.** [10]
The development of American education in the context of social and intellectual history. PROFESSOR CREMIN. M 3:10-5. Permission of the Instructor Required.

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71. History of Higher Education in America.

Colloquium.

Special emphasis upon the crisis of American colleges in Jacksonian America and the emergence of American universities. DR. McCAUGHEY. M 2:10-4.

72. History of Cities in America.

Colloquium.

Special emphasis on the intellectual implications of urbanization and efforts on the part of American thinkers to define an urban style of life. DR. McCAUGHEY. M 2:10-4.

74. Critics of Modern America: 1865 to Today.

[0]

Colloquium.

Utopian novelists, social critics, the literary attack on the Genteel Tradition, socialists, muckrakers, Progressives, expatriates and nihilists. Prerequisite: permission of the instructor. PROFESSOR BAXTER. Tu 2:10-4.

[75. Franklin D. Roosevelt and the New Deal.

PROFESSOR RAUCH.

Not given in 1969-70.]

76. Franklin D. Roosevelt and Foreign Affairs.

[0]

Colloquium.

The foreign policies of President Roosevelt considered as the formative stage of recent American involvement in world affairs. Emphasis on the fight against imperialism and isolation, Big Three and Big Five relations during the Second World War, and the founding of the United Nations. Prerequisite: permission of the instructor. PROFESSOR RAUCH. Tu 4:10-6.

81. Junior Readings in European History.

[0]

An interpretive analysis of selected works in European history which reflect the historian's art in a variety of forms. PROFESSOR KOSS. W 3:10-5.

82. Junior Readings in European History.

[0]

Same as History 81, Spring Term. PROFESSOR KOSS. W 4:10-6.

83. Junior Readings in American History.

[0]

An interpretative analysis of selected works in American history which reflect the historian's art in a variety of forms. PROFESSOR WILLIAMSON. W 3:35-5:25.

91-92. Senior Seminars in European Civilization.

[0]

Students will conduct individual research, in consultation with the instructor, on subjects in European thought and society of particular interest to themselves. The results of each project will be presented in seminar discussion in the form of the senior essay. MISS FAGAN, PROFESSORS WEMPLE and WOODBRIDGE. Section I W 4:10-6. Section II W 4:10-6. Section III Th 4:10-6.

93-94. Senior Seminar in American Civilization.

[0]

Individual research on diverse aspects of American history and presentation of results in seminar discussion in the form of the senior essay. PROFESSOR WILLIAMSON. Th 4:10-6.

ITALIAN

PROFESSOR: MARISTELLA DE PANIZZA LORCH
(Chairman for Barnard College; 231 Milbank Hall)

VISITING PROFESSOR: GIUSEPPE SANSONE

ASSISTANT PROFESSOR: SUZANNE F. WEMPLE

INSTRUCTORS: ENNIO RAO (Part-time), RINALDINA RUSSELL, P. NICO
SOLINAS

ASSISTANT: LINDA YELLEN

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO
BARNARD STUDENTS:

PROFESSORS: JOHN C. NELSON, OLGA RAGUSA, LUCIANO REBAY (De-
partmental Representative for Columbia College)

ASSOCIATE PROFESSOR: ROBERT HANNING

INSTRUCTOR: ALBERTA FABRIS GRUBE

LECTURER: IRVING PORTNER

A major in Italian is expected to attain (a) sufficient knowledge of the language to enable her to read, write and speak it, (b) a fundamental acquaintance with Italian literature, (c) ability to understand and interpret literary texts in Italian.

Courses: A minimum of ten courses, exclusive of language courses, to be planned as early as possible in consultation with the department; Course V3991x-V3992y.

Allied subjects: In consultation with their major adviser students should select courses in other languages and literatures, music, art history, philosophy, and religion.

The major examination consists of four hours of written work and an oral examination.

FOREIGN LANGUAGE REQUIREMENT FOR THE DEGREE: All new students who intend to satisfy the foreign language requirement in Italian must take a placement examination before registration. This examination tests the student's knowledge of grammar, her ability to comprehend written and spoken Italian, and her ability in free composition. Students receiving a sufficiently high grade will automatically fulfill the requirement. All others may do so by completing a full-year literature course, given in Italian, or Course V3333x with a minimum grade of B+.

Casa Italiana: The Casa Italiana, located on Amsterdam Avenue at 117th Street, is open to all students interested in Italian culture and literature. A program of lectures, concerts, plays, poetry recitations, and informal gatherings is organized to meet the students' needs.

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LANGUAGE COURSES

V1101x-V1102y. Elementary Full-Year Course.

An integral course for beginners with intensive oral-aural drill. Reading, translation, conversation. May not be taken simultaneously with Spanish 1-2. No credit is given for Course V1101x until Course V1102y has been completed. Work in the language laboratory for one hour weekly is a required part of the course. DRS. GRUBE, RUSSELL, and SOLINAS. Section I M Tu W Th F 9 (DR. SOLINAS). Section II M W F 12 and Tu Th 11 (DR. GRUBE). Section III M W 11-12:15 and Tu Th 11 (DR. RUSSELL).

V1201x-V1202y. Intermediate Course.

Intensive and extensive reading particularly from contemporary authors, translation, composition, and practice in conversation. MR. RAO and DR. RUSSELL. Section I M Tu W F 10 (DR. RUSSELL). Section II M W 11-12:15 F 11 (MR. RAO).

V1301x-V1302y. Intensive Elementary and Intermediate Course.

For linguistically gifted students who wish to acquire by intensive study the reading skill necessary to interpret Italian literary texts. DR. SOLINAS. M W F 12.

V3131x, V3132y. Third Year Conversation.

Discussions of contemporary Italy, with emphasis on politics, social aspects, literature and the arts. To be taken in conjunction with another course with no credit. DR. RUSSELL. Tu Th 2:10-3:25.

LITERATURE COURSES

For nonmajors, courses marked thus § will count toward the general college requirement. All courses are conducted in Italian.

§V3333x, V3334y. Introduction to Italian Literature.

Prerequisite: V1202 or the equivalent. Reading and interpretation of major Italian authors; training in composition. DR. GRUBE. M W F 2:10.

[§V3535x-V3536y. Dante, Petrarch, and Boccaccio. Not given in 1969-70.]

§V3537x. Poliziano, Lorenzoil Magnifico, Pulci, Machiavelli.

DR. GRUBE. M W F 11.

§V3538y. Boiardo, Ariosto, Castiglione.

DR. GRUBE. M W F 11.

[§V3639x-V3640y. Italian Literature from 1550 to 1800.

Not given in 1969-70.]

§V3733x. Foscolo, Leopardi, D'Annunzio, Ungaretti, Montale.

DR. SOLINAS. M W F 10.

§V3734y. Manzoni, Verga, Svevo, Pirandello, Silone, Moravia.

DR. SOLINAS. M W F 10.

ITALIAN

§V3991x-V3992y. Seminar in Italian Literature.

Required of majors. Open to other qualified students by permission of the chairman of the department. Intensive analysis of literary masterworks leading to the preparation of a critical essay. PROFESSOR REBAY. M 4:10-6.

COURSES GIVEN IN ENGLISH

Students majoring in Italian may take these courses only with the permission of the chairman of the department.

[V1122y. Studies in the Italian Renaissance. PROFESSOR LORCH.

Not given in 1969-70.]

History-Italian V1131x. Dante's World.

The historical background of Dante's political, theological, and ethical thought and the literary analysis of its poetical rendering. PROFESSORS LORCH and WEMPLE. Tu 3:30-5:10.

[History-Italian V1132y. Petrarch and the Roots of the Modern World.

Not given in 1969-70.]

V1133x. Petrarch and Petrarchism.

A study of the *Canzoniere* and its influence. PROFESSOR LORCH. Tu 10:30-12:10.

V1134y. Woman in Medieval Romance Literature.

Reading and analysis of relevant French, Italian, Provencal and Spanish texts. PROFESSOR SANSONE. M W 2:10-3:25.

V3642y. Studies in Contemporary Italian Arts: The Italian Film.

Rossellini and neo-realism, Visconti, Antonioni, Fellini. Complete films will be viewed outside of class. PROFESSOR LORCH and MISS YELLEN. Tu 2:10-4.

English-Italian C3050y. The Renaissance Epic.

Readings in Boiardo, Ariosto, Tasso, Spenser, Sidney. Italian works will be read in Italian. Both instructors present at all sessions. Pre-requisite: instructors' permission. Credit toward a major in Italian or English upon permission of the department. Students who take Italian V1301x-V1302y, Intensive Elementary and Intermediate Course, may register for this course. PROFESSORS HANNING and LORCH. Tu Th 11-12:15.

GENERAL STUDIES COURSES

(Conversation courses are not to be taken for credit.)

F1111x-F1112y. Elementary Conversation.

Intensive practice in pronunciation, vocabulary, reading aloud, comprehension of spoken language, and conversation.

F3335x-F3336y. Composition and Translation.

Training in correct expression in written Italian.

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F3479x. Dante.

Readings from the *Divine Comedy* and the minor works. Lectures, discussions, and reports.

F3480y. Petrarch and Boccaccio.

Readings from the *Canzoniere*, the *Decameron*, and other works. Lectures, discussions, and reports.

GRADUATE COURSES

Certain graduate courses given at Columbia University are open to qualified majors with the consent of the chairman of the department. A description of these courses will be found in the Announcement of the Graduate Faculties.

G4005y. Italian Lyric Poetry of the Thirteenth Century.

PROFESSOR SANSONE. Tu 2:10-4.

G4056y. The Italian Novel.

PROFESSOR RAGUSA. M 2:10-4.

G4081x, 4082y. Italian Literature of the Fourteenth and Fifteenth Centuries.

PROFESSOR NELSON. Th 2:10-4.

G4080x. Leopardi (in Italian).

PROFESSOR REBAY. M 2:10-4.

G6083x, 6084y. Studies in Humanistic Literature.

PROFESSOR LORCH. W 2:10-4.

LINGUISTICS

ASSISTANT PROFESSOR: JOSEPH L. MALONE

OFFICERS OF COLUMBIA UNIVERSITY GIVING INSTRUCTION TO BARNARD STUDENTS:

PROFESSOR: ROBERT AUSTERLITZ

ASSISTANT PROFESSOR: JAMES A. MATISOFF

The purpose of the study of linguistics is to develop understanding of the nature of language. The major is designed to provide the student with a broad appreciation of the fundamental problems of language analysis, some training in the techniques of linguistic research, as well as insight into the interrelations of linguistics with the other social and communicational sciences, the humanities, and philosophy and mathematics.

The student majoring in linguistics must (I) successfully complete Linguistics 21, 22, V3203x, V3206y, either V3301x or V3303x, and 60; (II) pass a major departmental examination at the end of her senior year; and (III) satisfy a program of language and related requirements to be worked out on an individual basis with the major adviser.

The student majoring in linguistics is also encouraged to take courses in old forms of language (e.g. English 53, French 31, Sanskrit G4101x-G4102y), history or philosophy or psychology of language (e.g. English 90, French 14, Russian G4103x, Philosophy 85, Psychology 20), and anthropological linguistics (e.g. Anthropology V3034y).

21, 22. Introduction to Linguistics. [5]

The nature of language. Characteristics of phonological and grammatical systems and of the lexicon. Evolution of language. Role of linguistics in related disciplines. Modern techniques of linguistic analysis. Note: Linguistics 21 is prerequisite to Linguistics 22. PROFESSOR MALONE. M W F 2:10.

V3203x. Synchronic Linguistics. [13]

Varied approaches to problems in synchronic linguistics, selected to emphasize critical points in linguistic theory. Prerequisite: Linguistics 21, 22, or Linguistics C3101x, C3102y. PROFESSOR MATISOFF. Tu Th 9-10:15.

V3206y. Historical Linguistics. [3]

The principles of both historical and comparative linguistics, with some consideration of the role of philology. Prerequisite: Linguistics 21, 22, or Linguistics C3101x, C3102y. PROFESSOR MALONE. M W F 11.

[V3301x. The Structure of a Language. PROFESSOR MATISOFF.

Not given in 1969-70.]

V3303x. Linguistic Analysis. [9]

Detailed examination of a linguistic problem chosen by the instructor: tense and mood in Roumanian. Introduction to Roumanian grammar and acquisition of a reading knowledge; examination of verbal con-

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structions and of their place in grammar. No previous knowledge of Roumanian is required, but some knowledge of another Romance language is recommended. Prerequisite: Linguistics 21, 22 or Linguistics C3101x, C3102y. PROFESSOR AUSTERLITZ. F 10-11:50.

60. Seminar in Linguistics.

[0]

Supervised research in the student's language of specialization; preparation of a term paper. Prerequisite: the linguistics major, and senior standing. PROFESSOR MALONE. M W 10.

MATHEMATICS

PROFESSORS: PATRICK X. GALLAGHER (Chairman; 333 Milbank Hall)

OFFICERS OF COLUMBIA UNIVERSITY GIVING INSTRUCTION TO BARNARD STUDENTS:

PROFESSORS: MASATAKE KURANISHI, LIPMAN BERS, SAMUEL EILENBERG, SERGE LANG

ASSISTANT PROFESSORS: ARMAND BRUMER, ROBERT GARDNER, ALAN LANDMAN, MARTIN MOSKOWITZ

RITT INSTRUCTORS:

Students taking only one year of mathematics ordinarily take Courses 7, 8 or IA, IIA, the latter being preferred if the mathematics is to be used in science courses. Calculus is offered in three sequences, designated A, B, and C. Students with above-average ability, or with a sustained interest in mathematics, particularly prospective mathematics majors, are expected to take the B or C sequence. These courses are, moreover, usually preferable to skipping a term of calculus when a student's background makes this choice possible.

An advanced placement score of 4 or 5 earns admission to the freshman section of IIIB, and advanced placement credit equivalent to one course, which is increased to two courses upon successful completion in the freshman year of IC-IIC or IIIB-IVB. A score of 3 earns admission to IIIA or IIB. Students who have had a course in differential calculus (but have not had a thorough grounding in integration) may take IIB.

A major in mathematics: Eight courses (exclusive of 7, 8) are required. These must include the following: Calculus I-IV (in the B or C sequence, if possible); either 35, 36 or 3161, 3262; at least two from among 31, 40, 3040, 3141. At least six of the required courses should be completed by the junior year. Graduate courses and courses in allied fields, such as statistics, physics, applied mathematics, history of science, etc., are often taken. Majors planning graduate study are advised to obtain a reading knowledge of two of the three languages: French, German, Russian.

The major examination, in the senior year, consists of the Undergraduate Record Examination.

¹7, ¹8. Mathematical Analysis. [2]

Designed to give the student who intends to take only one year of college mathematics as broad a view as possible of the nature of mathematics. Autumn Term: Trigonometry and algebra. Spring Term: Topics in analytic geometry, differential and integral calculus. This course is primarily for those who do not plan to major in mathematics or a physical science. Course 7 is prerequisite to Course 8. M W F 10.

C1101x, C1102y. Calculus IA and IIA.

The differential and integral calculus of functions of one variable, with applications to geometry and physics. Derivatives, integrals, fundamental theorem of calculus. Rational, radical, and elementary tran-

¹ Courses may not be counted toward a major in mathematics.

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scendental functions. Applications to motion, length, area, volume, energy, radioactive decay, vibration. Vector-valued functions, functions of several variables. Taylor's theorem. PROFESSOR BERS and M W F 11. Recitation sections: Tu or Th 8 or 12.

C1103x, C1104y (or C1104x). Calculus IB and IIB.

The same material as Course IA, IIA, with greater emphasis on the understanding of the mathematical concepts and logical structure. M W F 11. Recitation sections: Tu or Th 8 or 12.

C1107x, C1108y. Calculus IC and IIC.

The same material as Course IA, IIA. The terminology and style are thoroughly modern. Intended for students who have facility with discussions on an abstract level, or who appear likely to develop such facility early. Admission is by examination, given by the Columbia mathematics department during Freshman Week. M W F 11.

C1201x, C1202y. Calculus IIIA and IVA.

Calculus of functions of several variables, with applications to geometry and physics. Analytic geometry using vector language. Multiple integrals, line integrals, Green's theorem. Techniques of integration. Infinite series. Prerequisite: Calculus II for IIIA, III for IVA. Tu Th 11-12:15. Recitation sections: M or W, 8 or 12.

C1203x (or C1203y), C1204y (or C1204x). Calculus IIIB and IVB.

The same material as Calculus IIIA, IVA, with greater emphasis on the understanding of the mathematical concepts and the logical structure. Prerequisites: Calculus IIB or the equivalent for IIIB, Calculus IIIB for IVB.

C1203x, C1204y: Section I Tu Th 11-12:15. Recitation sections: M or W, 8 or 12. Section II M W F 11. Recitation sections: Tu or Th, 8 or 12 (freshman section). C1203y: M W F 11. Recitation sections: Tu or Th, 8 or 12, C1204x: Tu Th 11-12:15. Recitation sections: M or W, 8 or 12.

C1207x, C1208y. Calculus IIIC and IVC.

The material of Calculus IIIA, IVA, plus additional topics, as time permits. The terminology and style are thoroughly modern. Prerequisites: Calculus IIC for IIIC, Calculus IIIC for IVC. Tu Th 11-12:15.

31. Number Theory.

[6]

Congruences, quadratic residues, Gaussian sums. Number-theoretic functions. Distribution of primes. Irrational, algebraic and transcendental numbers. Prerequisite: Calculus II. PROFESSOR GALLAGHER. Tu Th 9:10-10:25.

35, 36. Analysis.

[2]

An introduction to the theory of functions of one or several real variables. Topological spaces and continuity, differentiability, and functional relations for mappings of Euclidean spaces, elements of the theory of Riemann and Lebesgue integration, infinite sequences and series. Prerequisite: Calculus IV or the equivalent. PROFESSOR STRODT. M W 10:35-11:50.

40. Group Theory. [6]
 Sets and maps. Groups, subgroups, factor groups. Actions of groups on sets. Sylow's theorem. Symmetry groups of geometric figures. Prerequisite: Calculus III. PROFESSOR GALLAGHER. Tu Th 9:10-10:25.

W3005x, W3006y. Advanced Calculus for Science Majors.
 Completion of the basic calculus sequence with the essential groundwork for applications to physics and engineering. Autumn Term: Power series in several variables, differentiation of maps, implicit function theorem, change of variables in multiple integration, Green's and Stoke's Theorem. Vector notation is used. Spring Term: Uniform convergence, differentiation of series and integrals. Riemann-Stieltjes integrals, Fourier series, Legendre polynomials, Bessel functions, orthogonality. Terms may be taken in either order. Prerequisite: Calculus IV. Tu Th 1:10-2:25.

W3007x. Complex Variables.
 An elementary course in functions of a complex variable. Complex numbers, analytic functions, Cauchy-Riemann equations. Cauchy integral theorem, Taylor and Laurent series, poles and essential singularities, conformal mapping. M W 1:10-2:25.

W3010x. Fundamental Concepts of Mathematics.
 The groundwork on which almost all modern mathematics rests. Sets, mappings, relations, ordered sets, well-ordering, natural numbers, cardinal numbers, ordinal numbers, choice functions, Zorn's lemma, induction, real and complex numbers. Prerequisite: Calculus IV or the equivalent. M W 4:10-5:25.

W3027x (or W3027y). Differential Equations.
 The solution of ordinary differential equations, principally by formal methods. Applications to geometry and physics. Prerequisite: Calculus IV or equivalent. Autumn Term: Tu Th 5:40-6:55. Spring Term: M W F 10.

W3028y. Partial Differential Equations.
 The solution of partial differential equations, with applications to problems in geometry and mechanics. Prerequisite: Course W3027x or equivalent. Tu Th 5:40-6:55.

W3040x, W3041y. Introduction to Modern Algebra.
 Introduction to groups, rings, fields, with examples. Polynomials, algebraic number fields, the Galois theory and applications. Prerequisite: Calculus IV or consent of instructor. M W 2:40-3:55.

W3161x, W3162y. Introduction to Modern Analysis.
 Topics include: Metric spaces and their completion, topological spaces and the theory of continuous functions and convergence, inverse mapping theorems and existence theorems for differential equations, differential forms and their integrals, Fourier transforms. Prerequisite: Calculus IV or the equivalent. Tu Th 1:10-2:25.

W3202x (or W3202y). Linear Algebra.
 Vector spaces, linear transformations, matrices, quadratic forms. Prerequisite: Calculus II or the equivalent. Autumn Term: Tu Th 5:40-6:55. Spring Term: Tu Th 10, W 12.

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W3375x. Geometric Topology.

Elementary combinatorial properties of polyhedra. The fundamental group; elementary homology theory and related invariants. Topology of surfaces and their classification. Prerequisite: Calculus IV or consent of instructor. Tu Th 4:10-5:25.

W3386y. Differential Geometry.

Local and global differential geometry of submanifolds of Euclidean 3-space. Frenet formulas for curves. Various types of curvatures for curves and surfaces and their relations. The Gauss-Bonnet theorem. Prerequisite: Calculus IV or equivalent. Tu Th 4:10-5:25.

W3940x, W3941y. Seminar in Algebra.

Discussion and readings of selected topics in algebra. Prerequisite: Course W3041. M W 2:40-3:55.

W3961x, W3962y. Seminar in Analysis.

Discussion and readings of selected topics in analysis. Prerequisite: Course W3162. M W 1:10-2:25.

Mathematical Statistics G4105x. Probability.

Fundamentals; random variables and distribution functions in one or more dimensions; the binomial, normal, and Poisson distributions; combinatorial problems; moments and characteristic functions; stochastic convergence and the law of large numbers; addition of random variables and limit theorems; the chi-square, t, and F distributions. Prerequisite: Calculus IV. M W 5:40-6:55.

Mathematical Statistics G4107y. Statistical Inference.

Principles of statistical decision procedures. Point estimation. Unbiased consistent, efficient, and sufficient estimates. Method of maximum likelihood. Testing hypotheses. Normal, binomial, and Poisson distributions. Prerequisite: G4105. PROFESSOR ROLPH. M W 5:40-6:55.

GRADUATE COURSES

Students are urged to consult the Announcement of the Graduate Faculties for further information.

MUSIC

ASSOCIATE PROFESSOR: HUBERT DORIS (Chairman for Barnard; 709 Dodge Hall)

ASSISTANT PROFESSOR: PATRICIA CARPENTER

INSTRUCTOR: KENNETH COOPER

ASSOCIATE IN MUSIC: DANIEL PAGET

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSORS: JACK BEESON, PAUL H. LANG, VLADIMIR USSACHEVSKY

ASSOCIATE PROFESSORS: CHOU WEN-CHUNG, NICHOLAS ENGLAND, JOEL NEWMAN, HOWARD SHANET

VISITING ASSOCIATE PROFESSOR: URSULA KIRKENDALE

ASSISTANT PROFESSOR: BENJAMIN BORETZ

INSTRUCTORS: GEORGE FLYNN, WALTER HILSE, HARVEY SOLLBERGER, PIERO WEISS, CHARLES WUORINEN

LECTURER: CHRISTOPHER HATCH

TEACHING STAFF IN APPLIED MUSIC:

DAVID JOSEPHSON, University Band

HOWARD SHANET, University Orchestra

M. SEARLE WRIGHT, Chapel Choir

DANIEL PAGET, Barnard-Columbia Chorus

A major in music is designed to integrate music as an art and a craft within the framework of the liberal arts.

A student intending to major in music should start the theory sequence with Course V3335x (Species Counterpoint) as early as possible. Course 1-2, though a prerequisite for more advanced literature courses, is not required of music majors, since they cover the same type of material in greater depth in the courses already required of them.

In general, major programs are planned to include nine courses of advanced work in literature, history, and theory. Ordinarily Courses V3123x-V3124y, V1331x-V1332y, V3333y, V3334x, V3335x, and V3373x-V3374y are required. (Courses V3336y and V3239x-V3240y are required of students intending to specialize in composition.) Course V3125x is highly recommended as an elective. Applied music (a maximum of one course) may be counted toward the degree but is not required.

Other fields: A reading knowledge of German, Italian, or French is required. Students planning to do graduate work in musicology, or ethnomusicology, must know at least two foreign languages, including German and French. Courses in art history, history, philosophy, literature, and foreign languages are recommended for their relationship with musical studies, and should be elected after consultation with the department.

Students are advised to consult the Announcement of the Graduate Faculties for those courses open to seniors and others with advanced training.

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At the end of the sophomore year students planning to major in music will be expected to file with the department certificates stating that they have passed an examination in elementary piano. A student found deficient in piano techniques is required to take supplementary piano lessons. If she is unable to pay for such lessons herself, she may apply to the college for financial aid. As with other applied music activities, these lessons will carry the equivalent of one quarter academic credit per semester.

Majors must have participated for two years in the chorus, orchestra, choir, concert band, or other musical ensembles by the time they are graduated.

Students majoring in music are required to take a major examination at the end of the senior year which will test their ability to deal primarily with problems in music history, theory, and analysis.

Practice rooms: The department provides practice rooms at a nominal charge. Preference in assigning hours is given in order of application to music majors and those enrolled in courses given by the department. Application for practice time should be made at the Office of Buildings and Grounds, Milbank Hall: during registration and the first week of classes by music majors, and by all others during the week following.

Library: Books, scores and records are available at the Barnard College Library. The Columbia University Music Library contains an extensive collection of music materials for reference, research, and circulation. In addition, phonographs with a large collection of recordings are also available for use by students registered in music courses other than Course 1-2.

LITERATURE AND HISTORY

1-2. An Introduction to Music.

A study of the elements of musical structure designed to form intelligent listening habits, and of the several great epochs of music, with emphasis on their style and structure. No previous knowledge of music is required. This course is not designed for students majoring in music. PROFESSOR DORIS, PROFESSOR CARPENTER and MR. COOPER. Section I M W F 11. [3] Section II M W F 12. [12] Section III M W F 1:10. [4] One hour per week of supervised listening.

[V1003y. Literature of the Solo Song.

PROFESSOR DORIS. Not given in 1969-70.]

V1004y. Literature of the Pianoforte.

A survey of pianoforte literature from the eighteenth century to the present. Prerequisite: Course 1-2 or the equivalent. MR. WEISS. M W F 2:10.

V1005x. The Opera.

A rapid survey of the development of opera from Monteverdi to the present. Prerequisite: Course 1-2 or the equivalent. PROFESSOR BEESON. M W 1:10-3.

V1006y. The Symphony.

A survey of symphonic style and structure from about 1750 to the present. Prerequisite: Course 1-2 or the equivalent. PROFESSOR DORIS. M W 2:10-3, F 2:10-4. One hour is a listening hour.

V1007y. Music of the World's Peoples.

An introduction to musical practices of the world, excluding the tradition of Euroamerican classical music. Instructor to be announced. Tu Th 4:10-6. One hour is a listening hour.

V1008x. Contemporary Music.

A survey of contemporary music from Debussy to the present. Prerequisite: Course 1-2 or the equivalent. MR. WUORINEN. Tu Th 4-10-6.

[V1012y. Haydn and Mozart.

Not given in 1969-70.]

V1109x, V1110y. History of Dance.

A survey of the development, history, aesthetics, and philosophy of dance, with particular reference to drama, opera, ballet, and modern dance. Lectures and demonstrations; interviews with specialists in the field and practice in selected dance movements. MRS. ROOSEVELT and MR. SORELL. Tu 7:10-9:50 p.m.

V1014x. Chamber Music.

A survey of some significant works from the literature of chamber music. Prerequisite: Course 1-2 or permission of the instructor. MR. COOPER. Tu Th 2:10-4. One hour is a listening hour.

V1015y. American Music.

A survey of music in America from Colonial times through the 1950's. Attention is given to the interrelationships among folk, "entertainment," and art music. Prerequisite: Course 1-2 or equivalent. PROFESSOR NEWMAN. Tu Th 2:10-4. One hour is a listening hour.

V1617y. Electronic Music: Its Evolution and Techniques.

A comprehensive survey of electronic music from 1948 to 1968, with detailed analysis of compositional techniques and their evolution and application by various groups and individual composers. Technical procedures employed in creating electronic sound materials will also be discussed. Prerequisite: Courses 1-2, V1331, and the instructor's permission. Registration limited to 25 students. PROFESSOR USSACHEVSKY. Tu Th 7:10-8:25.

V3042y. Aesthetic Disciplines in Music.

Basic concepts in aesthetics will be applied to music; the resulting problems in describing, explaining and evaluating music will be examined. PROFESSOR CARPENTER. Prerequisite: senior standing and the permission of the instructor. Tu 4:10, F 3:10-5. (Limited to 12 students.)

V3123x-V3124y. History of Music.

A survey of the history of music from the beginning of the Christian era to the nineteenth century. One hour of class time each week will consist of musical illustration. Prerequisite: Course V1331x-V1332y or the equivalent. PROFESSORS KIRKENDALE (V3123x) and NEWMAN (V3124y). Tu Th 10-11:50.

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V3125x. Nineteenth-Century Music.

A history of music in the Romantic Era. This course is designed as a continuation of Course V3123x-V3124y, but may be taken separately and at any time after completion of Course V1332y. PROFESSOR DORIS. M W F 2:10.

V3179x-V3180y. Seminar. Historical and Analytical Studies in the Literature of Music.

Required seminar for senior majors to supplement and coordinate previous studies. Section I PROFESSOR LANG. Th 3:10-5. Section II PROFESSOR DORIS and PROFESSOR CARPENTER. W 3:10-5.

THEORY.

V1329x, y. Musicianship.

The basic elements of music are studied with the aim of developing musicianship. Special attention is given to individual student needs. MR. FLYNN. Tu Th 4:10-5:25.

V1331x-V1332y. Harmony I and II.

A study of the diatonic triadic tonal system. This course is required of music majors and should be elected by those nonspecialists planning to take more advanced courses in theory and composition. Textbook: Mitchell, *Elementary Harmony*, 3rd edition. Prerequisite: the ability to play the piano, the equivalent of a course in elementary musicianship, and the instructor's written permission. Before registering for V1331x, students must take the placement examination on Monday, September 22, 10 a.m., Room 710 Dodge. MESSRS. COOPER and ENGLAND. M W F 1:10. Laboratory hours: M W 2:10.

V1333x-V1334y. Harmony I and II.

The content of V1331x-V1332y is exemplified by a wide range of music literature with less attention to the details of part-writing. This course is designed for those students who do not plan to elect more advanced courses in theory or composition. Textbook: Mitchell, *Elementary Harmony*, 3rd edition. Prerequisite: as in V1331. Instructor to be announced. M W F 1:10. Laboratory hours: M W 2:10.

V3535y. Advanced Keyboard Techniques.

The study of sight-reading, advanced score-reading and figured bass improvisation at the piano as applied to the literature of music. Prerequisite: Course V1331-V1332 or the equivalent, the ability to play the piano, and the instructor's permission. Registration limited to 12 students. MR. COOPER. M W F 4:10.

V3333x. Chromaticism.

An analytical study of the elements of chromaticism. The exercises in various chromatic styles are taken from the literature and are designed to introduce the student to characteristic features of musical texture. Prerequisite: Course V1331x-V1332y or the equivalent. Parallel, advised but not required: Course V3335x, V3336y. PROFESSOR BORETZ. M W F 10.

V3334y. Analysis.

Principles of design, texture, rhythm, and the organization of musical detail as revealed through a study of compositions selected from the

several periods of musical history. Prerequisite: Course V3333x. Recommended, but not required: Course V3335x, V3336y. PROFESSOR BORETZ. M W F 10.

V3335x. Species Counterpoint.

A study of the five species in two and three parts, strict style. MR. PAGET. M W F 11.

V3336y. Contrapuntal Techniques.

Contrapuntal practices; the composing and analysis of polyphonic works in various styles. MR. PAGET. M W F 11.

V3239x-V3240y. Composition.

Composition in the smaller forms, for voice, chorus, piano, organ, and pieces for violin or other instruments with piano. Prerequisite: Course V3333x or written permission of the instructor. Instructor to be announced. W 2:10-4.

V3241x-V3242y. Advanced Composition.

A continuation of Music V3239x-V3240y. Prerequisite: Course V3239x-V3240y or permission of the instructor. MR. WUORINEN. W 4:10-6.

V3373x-V3374y. Orchestration, Conducting, and Score-Reading.

Lectures and practice in orchestration and score-reading, supplemented by practical demonstrations of instruments. Prerequisite: Course V1331x-V1332y or the equivalent and written permission of the instructor. PROFESSOR SHANET and MR. HILSE. M W F 11.

PERFORMANCE ACTIVITIES (APPLIED MUSIC)

A detailed description of the following activities is given in the *Barnard Student Handbook*.

Academic credit, granted by petition at end of the semester, amounting to one quarter of a course per semester is given for participation in the following activities, with the exception of Music for an Hour.

Audition and rehearsal schedules for all activities will be posted outside the Columbia departmental office, at least a week before registration.

University Orchestra: PROFESSOR SHANET.

Auditions: During registration week by appointment. Room 703 Dodge.

Rehearsals: M 5:30-7:30 on the stage of McMillin Theatre, and M W F 5:30-7:30 in the three weeks preceding each concert.

Chapel Choir: MR. WRIGHT.

Auditions: Friday, September 19, from 2 to 5; Monday-Wednesday, September 22-24 from 10 to 12 and 2 to 5, in the Chapel Crypt.

Rehearsals: M W F 5-6:15.

Barnard-Columbia Chorus: MR. PAGET.

Auditions: During registration week by appointment. Room 703 Dodge.

Rehearsals: M W 7:30-9:30 p.m. in Room 304 Barnard Hall.

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University Bands: MR. JOSEPHSON.

Auditions: Concert Band, during registration week and by appointment.

Rehearsals: Tu Th 4-6.

Collegium Musicum.

This organization acquaints the student with certain neglected and unfamiliar masterpieces of vocal and instrumental music not heard in concerts elsewhere. Music majors are particularly urged to attend the meetings and to participate in performances.

Music for an Hour.

This series of informal chamber concerts, held the last Tuesday in every month in the James Room of Barnard Hall, is designed to give all interested instrumentalists a chance to perform for the University community. All those interested in participating should consult PROFESSOR DORIS.

Study Groups in African Music.

Weekly meetings in study and performance, under the direction of musicians from Africa are open to all members of the University community upon application in 703 Dodge. Hours are announced at the beginning of each term.

ORIENTAL STUDIES

ASSOCIATE PROFESSOR: JOHN MESKILL (Department Representative;
101 Barnard Hall)

ASSISTANT PROFESSOR: BARBARA STOLER MILLER

OFFICERS OF COLUMBIA UNIVERSITY GIVING INSTRUCTION JOINTLY TO
BARNARD and COLUMBIA STUDENTS:

PROFESSORS: WM. THEODORE DE BARY, IVAN MORRIS

ADJUNCT PROFESSOR: ARTHUR S. LALL

VISITING PROFESSOR: RASIK VIHARI JOSHI

ASSOCIATE PROFESSORS: H. PAUL VARLEY, BURTON WATSON, HER-
SCHEL F. WEBB

ADJUNCT ASSOCIATE PROFESSOR: PHILIP B. YAMPOLSKY

ASSISTANT PROFESSOR: FRANK BALDWIN

INSTRUCTORS: LEONARD GORDON, JEANETTE WAKIN

LECTURER: DORIS SRINIVASAN

PRECEPTORS: FRANKLIN DOERINGER, ROBERT GIMELLO, ROYALL
TYLER, FREDERICK UNDERWOOD, JACK VAN HORN

Oriental Studies aims to provide, by means of the first three courses listed below, an introduction to major aspects of four living Asian civilizations. These courses are designed for any student, whatever her major, who wishes to include knowledge of Asia in her education.

Majors in the program will be prepared for further study in graduate school or some other related professional training. They will concentrate on one of the following regions or countries: the Near and Middle East, India, China, or Japan.

Program. *As corollary requirements and prerequisites:*

Approximately three courses in a regular academic department,
such as history or literature.

Either Oriental Civilizations V3355x-V3356y or Oriental Civiliza-
tions V3001x-V3002y, usually to be completed by the end of
the sophomore year.

As major requirements:

Two years of an Oriental language (in addition to other college
language requirements).

6 courses in Oriental subjects, divided between the social sciences
and the humanities.

A senior seminar, or its equivalent.

A major examination or, in some circumstances, a shorter exami-
nation and a paper.

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All individual courses will be chosen in consultation with the major adviser. Majors in the program come under the administration of Area Studies. For admissions procedures and other details, see page —.

Oriental Civilizations V3355x-V3356y.

The more important factors in the life of peoples of India, China, and Japan, together with an appraisal of their role in the world today. Autumn Term: The evolution of these civilizations to recent times, emphasizing their characteristic institutions and intellectual traditions. Spring Term: Developments in the nineteenth and twentieth centuries as these societies have confronted the modern West while still grappling with age-old problems. Fourth hour: Lectures and audio-visual illustrations. Prerequisite: one course in history or permission of instructor. PROFESSORS DE BARY, LALL, MESKILL, MILLER, VARLEY, and WEBB, MESSRS. BALDWIN, DOERINGER, GIMELLO, GORDON and MRS. SRINIVASAN. Section I M W F 9. Section II M W F 10. Section III M W F 11. Section IIIA M W F 11. Section IV M W F 2:10 Fourth hour W 12.

Oriental Humanities V3399x-V3400y.

A selection from the works of Near Eastern, Indian, Chinese, and Japanese authors. This course will be conducted as a colloquium and will be devoted to readings in translation and discussion of major works in the literature, philosophy and religion of several Oriental traditions. The Autumn Term will deal with works from the Near East and India; the Spring Term with readings from China and Japan. Open to juniors and seniors who have completed two courses of literature and one course of philosophy or religion, or have written permission of instructor. PROFESSORS DE BARY, JOSHI, MESKILL, MILLER, MORRIS, and YAMPOLSKY, and MR. DOERINGER, MR. TYLER, MRS. WAKIN, MR. UNDERWOOD, and MR. VAN HORN.

Section	I	Tu 3:10-5.	(Columbia students)
Section	II	W 2:10-4.	(Columbia students)
Section	III	Th 3:10-5.	(Columbia and Barnard students)
Section	IV	Th 7:10-9 p.m.	(Columbia students)
Section	V	F 1:10-3.	(Columbia and Barnard students)
Section	VI	M 3:10-5.	(Barnard students)
Section	VII	Tu 7:10-9 p.m.	(General Studies students)

Oriental Civilizations V3001x-V3002y. Introduction to Islamic Civilization.

Autumn Term: An examination of Islamic civilization. Its institutional and intellectual characteristics to A.D. 1800. Spring Term: Important factors, such as the impact of the West and nationalism, on the Islamic peoples from 1800 to the present. MRS. WAKIN. M W 3:10-4:25.

Oriental Studies V3379x. Readings in Oriental Studies.

Colloquium on major problems of Asian civilizations, for the purpose of appraising concepts and methods currently employed in the field. For majors and, by permission, other students. Prerequisite: Oriental Civilizations V3355x-V3356y. MEMBERS OF THE DEPARTMENT. Th 3:35-5:15.

ORIENTAL STUDIES

History G6525x, G6526y. History of Modern India.

The development of modern India from the decline of the Mughal Empire to the present time. Special attention will be given to the impact of the West, the rise of nationalism, the social, political and economic problems of independent India, and foreign relations. Permission of instructor required. MR. GORDON. M W 10.

Chinese History G6815x, G6816y. Introduction to the Civilization of China.

An examination of Chinese history from ancient times to the beginning of the seventeenth century, with special attention given to characteristic political, economic and social developments. Permission of PROFESSOR MESKILL required. PROFESSOR BIELENSTEIN. M W 11.

Oriental Studies V3501x, V3502y. Seminar in Asian Literature.

Autumn Term: Selected themes of Chinese, Japanese, and Indian poetry. Spring Term: Selected topics in the contemporary literature of China, Japan, India, and the Near East. Open to juniors and seniors with the permission of PROFESSORS MESKILL or WATSON. PROFESSOR WATSON. W 2:10-4.

Oriental Studies V3507x, V3508y. Seminar on Comparative Studies in Asian Civilizations.

Autumn Term: Concepts of Asia in European and Asian social and historical thought. Spring Term: Studies in the modernization of the traditional societies of China, Japan, and India. Permission of PROFESSORS MESKILL or VARLEY required. PROFESSOR VARLEY and MESSRS. DOERINGER and GORDON. M 7:10-9 p.m.

The following courses in Columbia University are open to majors who have the consent of their advisers and PROFESSOR MESKILL, Officer in charge of Area Studies. Descriptions may be found in the Announcements of Columbia College, the Graduate Faculties and the School of General Studies.

Anthropology G4187x. Problems of South Asian Ethnology.

PROFESSOR KLASS. W 1:10-3.

Arabic F1101x-F1102y. Elementary Arabic.

PROFESSOR MADINA. M 6:40-7:55 p.m. Th 6:10-7:25 p.m.

Chinese C1101x-C1102y. Elementary Chinese.

MRS. CHANG SOBELMAN and MRS. HSIA. Section I M Tu W Th F 9. Section IIa M Tu W Th F 10. Section III M Tu W Th F 11.

Chinese C1201x-C1202y. Intermediate Chinese.

MR. YEU. M Tu W Th F 10.

Chinese G4005x-G4006y. Advanced Chinese.

MR. LO and MISS PAN. Section I M W 11-12:50. Section II M W Th 5:40-7:05.

Chinese G4031x, G4032y. Chinese Literature.

PROFESSORS WATSON and KAO. Tu Th 10.

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Chinese G4033x. Modern Chinese Literature.

PROFESSOR

Chinese-History G6825x, G6826y. History of Modern China.

PROFESSOR WILBUR. W 2:10-4.

Chinese G6027x-G6028y. Introduction to Chinese Thought.

PROFESSOR DE BARY. F 2:10-4.

History-Japanese G6840y. Japan in the Twentieth Century.

PROFESSOR TIEDEMANN. Th 2:10-4.

History-Japanese G6832x. Early Japan.

PROFESSOR MORRIS. Tu Th 11.

Indic G4101x, G4102y. Institutions and Civilizations of the Himalayan Area.

PROFESSOR RICCARDI. F 10-11:50.

Japanese C1101x-C1102y. Elementary Japanese.

PROFESSOR RYAN. M Tu W Th F 11-12:25.

Japanese C1201x-C1202y. Intermediate Japanese.

MRS. CH'EN. M Tu W Th F 10.

Japanese G4005x-G4006y. Advanced Japanese.

PROFESSORS SHIRATO and LANGE. Section I M W F 11-12:25. Section II
M W F 6:10-7:35.

Japanese G4031x, G4032y. Japanese Literature.

PROFESSOR KEENE. Tu Th 10.

[Japanese G6027x-G6028y. Introduction to Japanese Thought.

PROFESSOR DE BARY. Not given in 1969-70.]

Persian G4602y. Introduction to Persian Literature.

PROFESSOR YAR-SHATER. Tu 2:10-4.

Sanskrit G4101x-G4102y. Elementary Sanskrit.

PROFESSOR SCHWARTZ.

Sanskrit G6101x-G6102y. Sanskrit II.

PROFESSOR MILLER. M W F 10.

PHILOSOPHY

PROFESSORS: ¹JOSEPH GERARD BRENNAN, MARY MOTHERSILL (Chairman; 35 Milbank Hall)

ASSOCIATE PROFESSOR: SUE HOWARD LARSON

ASSISTANT PROFESSOR: ROBERT E. MCGINN

VISITING ASSISTANT PROFESSORS: MARGARET D. WILSON, EDWARD KENT

INSTRUCTOR: ROBERT HAMBOURGER (Part-time)

The major in philosophy is designed to develop competence in techniques of conceptual analysis and to acquaint the student with the major areas for investigation in traditional and contemporary philosophic theory.

Within the limits of the prerequisites described below, philosophy courses may be taken in any sequence: the numbers assigned to particular courses indicate roughly the level of competence expected of students. (Transfer students who wish to count courses taken elsewhere as prerequisites for Barnard courses must have written permission from the Chairman of the Philosophy Department and may be required to take a placement test.)

A student who majors in philosophy is required to take the following courses or their equivalents: 1, 5, 8, 35, 36, and in the senior year, the seminar, 87-88. Qualified senior majors are permitted to enroll in philosophy courses offered by the Graduate Faculties of Columbia University. Permission for such enrollment should be obtained from the chairman of the Barnard department.

1x (or 1y). Introduction to Philosophy.

Interpretation and analysis of major topics in ethics, metaphysics, theory of knowledge. Readings from historical and contemporary sources. PROFESSORS BRENNAN, MOTHERSILL, LARSON, MCGINN, WILSON, KENT and MR. HAMBOURGER. Section I M W F 9. [1] Section II M W F 10. [2] Section III M W F 11. [3] Section IV Tu Th 10:35-11:50. [7] Section V M W F 12:10. [12]

2x (or 2y). First-Year Seminar. [9]

Intensive study of recent philosophical literature on a topic to be selected by the instructor. The aim of the course is to acquaint students with current philosophical methods and sources and to provide experience in writing and discussion. Several short papers and one long paper will be required. Open to a limited number of students upon completion of Course 1 and departmental recommendation. Autumn Term: PROFESSOR LARSON. Spring Term: PROFESSOR KENT. Tu Th 2:10-3:25.

5. Logic I. [4]

Presented as a formal science, logic will be distinguished from the methodology of the empirical sciences. Analysis of the formal elements of classical logic will be followed by an introduction to symbolic logic. PROFESSOR BRENNAN. M W F 1:10.

¹ Absent on leave, Spring Term.

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8. **Ethics.** [6]
An introduction to the central problems of moral philosophy. Among the topics covered are: action and reasons for action; pleasure and pain; obligation, rights and duties; alternative moral ideals; the use of moral language. Prerequisite: Course 1 or the permission of the instructor. PROFESSOR MOTHERSILL. Tu Th 9:10-10:25.
32. **Logic II.** [9]
An introduction to symbolic logic through quantification theory. Explication of concepts such as the following: sentence interpretation; truth; consequence; validity; consistency; tautology; derivation. Prerequisite: Course 5 or the permission of the instructor. MR. MCGINN. Tu Th 2:10-3:25.
- 35, 36. **History of Philosophy.** [2]
Autumn Term: Ancient and medieval philosophy. Spring Term: Modern philosophy. Prerequisite: Course 1 or 5 or permission of the instructor. Either term may be taken separately. Autumn Term: PROFESSOR KENT. Spring Term: PROFESSOR WILSON. M W F 10.
38. **Twentieth-Century Philosophy.** [5]
A study of selected topics in contemporary English and American philosophy. MR. MCGINN. M W F 2:10.
- 39, 40. **Supplementary Readings in Philosophy.** [0]
To be taken only with the consent of the instructor and the permission of the department.
41. **Aesthetics.** [6]
Systematic consideration of problems in aesthetics and philosophy of art including: the nature of aesthetic concepts; visual form and representation; expression; aesthetic functions of language; the possibility of resolving conflicts of taste. Prerequisite: Course 1 or the permission of the instructor. PROFESSOR MOTHERSILL. Tu Th 9:10-10:25.
43. **Philosophical Implications of the Modern Novel.** [3]
Autumn Term: Reading of Schopenhauer's *The World as Will and Idea* and three works of Nietzsche, followed by a study of Thomas Mann's *The Magic Mountain*, accompanied by a reading of other Mann works. Herman Hesse's novels are discussed with particular attention to *Steppenwolf* and *Magister Ludi*.
- [44. **Philosophical Implications of the Modern Novel.**
Spring Term. Not given in 1969-70.]
47. **Philosophy of Science.** [9]
A systematic exploration of problems related to the natural and social sciences. The topics for discussion include the following: explanation; law; theory; grounds of inductive inference; probability; theory of measurement. Prerequisite: Course 1 or Course 5 or permission of the instructor. MR. MCGINN. Tu Th 2:10-3:25.
75. **Social Philosophy.** [5]
A consideration of issues such as the following; the concept of the state; law; public interest; the measurement of utility; theory of social decision. Prerequisite: Course 1, 5, 8 or the permission of the instructor. MR. MCGINN. M W F 2:10.

- 77. Theory of Knowledge.** [7]
A general account of the concepts of belief, knowledge, evidence, judgment and error. Readings from contemporary and classical sources. Prerequisite: Course 1, 5 or permission of the instructor. PROFESSOR WILSON. Tu Th 10:35-11:50.
- 82. Metaphysics.** [9]
Systematic consideration of problems related to some fundamental metaphysical distinctions, including substance-attribute, particular-universal, mind-body, necessity, contingency and causality. Readings in contemporary and classical philosophy. Prerequisite: Course 1 or the equivalent. PROFESSOR LARSON. Tu Th 2:10-3:25.
- 83. Philosophy of Education.** [2]
Classical readings include Plato's *Republic* and Rousseau's *Emile*. The idea of individualism, in both its European and American forms, is traced from Rousseau to Dewey, leading to discussion of problems in present day American educational ideology. Selected readings are assigned concerning ideas of "middle class" and black education. Discussion of theories of higher education is supported by readings from Newman's *The Idea of a University* as well as some related to recent events in American universities. PROFESSOR BRENNAN. M W F 10:00.
- 85. Philosophy of Language.** [5]
A systematic consideration of such problems as: the possibility of giving a general characterization of language, the relation of syntactic and semantic systems to natural languages, intentional and causal theories of meaning, analysis of speech acts. Prerequisite: Course 1 or 5 or permission of the instructor. PROFESSOR LARSON. M W F 2:10.
- 87-88. Senior Seminar.** [0]
An intensive study of selected philosophical classics. Discussion, oral reports and term papers. Required of all majors in their senior year. Autumn Term: PROFESSOR MOTHERSILL. W 3:10-5:00. Spring Term: PROFESSOR LARSON. W 3:10-5:00. Conference hours to be arranged.

PHYSICAL EDUCATION

ASSISTANT PROFESSOR: MARION R. PHILIPS (Chairman; 209 Barnard Hall)

ASSOCIATES: SANDRA GENTER, EDITH G. MASON, JEANETTE S. ROOSEVELT

INSTRUCTORS: GAY DELANGHE, LINDA LERNER

The program is organized and administered by the Department of Physical Education in cooperation with the Medical Department and the Recreation and Athletic Association. It is designed to provide the students with knowledge, skills, habits, and attitudes concerning health, physical activity, and recreation.

The Faculty requires the completion of six semesters of physical education from the time of admission as freshmen, four semesters from the time of admission as sophomores, and two semesters from the time of admission as juniors. Students are not recommended for the degree if they fail to fulfill this requirement.

Medical examinations and posture analysis: Two complete medical examinations by the College Physician are required of all students during the four years. One complete posture examination is required by the Department of Physical Education upon entrance. Subsequent posture examinations will be given whenever indicated. The results of these examinations are expressed in terms of a health and activity grade which determines the program best suited to the individual.

Freshman requirement: First semester: Three hours per week on different days. Two of these hours are the prescribed freshman course.

Section I M W 12

Section V Tu Th 11

Section II M W 1

Section VI Tu Th 2

Section III M W 2

Section VII Tu Th 3

Section IV M W 3

The third hour is elective and is usually assigned to a Friday hour.
Second semester: Two hours per week on different days.

Sophomore and Junior requirement: Two hours per week on different days.

Registration: Held simultaneously with registration for academic courses. See College Calendar for specific dates, page 5. Students who fail to register for physical education by the close of the registration period are subject to the fine for late registration.

Exemption: Registration for Autumn Term indoor season and Spring Term outdoor season is held separately prior to the beginning of these two seasons of activities.

PHYSICAL EDUCATION

Program of activities: Two sessions each term: autumn-winter; winter-spring.

The program is posted on the Physical Education bulletin board two weeks prior to the registration dates.

Activities offered each semester: archery, badminton, basketball, body conditioning, bowling, corrective exercises, diving, fencing, folk dance, golf, Israeli dance, modern dance, movement education, relaxation, swimming—all levels and speed swimming, synchronized swimming, Red Cross lifesaving, water safety instructor's course—tennis, and volleyball.

Most activities are offered as full-semester courses.

During the autumn and spring seasons, outdoor tennis, golf and archery are offered.

Greek Games—athletics and dance are scheduled for the Spring Term only.

In all of these activities students are advised to register according to their skill level; i.e., beginning, intermediate, or advanced.

The Physical Education Handbook explains the complete offerings of the department.

Prescribed costume: Students are required to wear the regulation costumes indicated for the various activities. Approximate cost is \$22.

The following courses are offered for academic credit:

Dance 3. Form in Dance Composition.

Study of the development of dance form through the manipulation, according to formal composition principles, of rhythm, energy and design in movement. Prerequisite: written permission of the instructor. MRS. SOARES. M 6-8 p.m., F 11-1. Autumn Term.

Dance 4. Content in Dance Composition.

Research in the source materials of dance composition and exploration of their uses in choreography. Sources include gesture, movement texture, rhythmic structure, movement shape, and literary ideas. Emphasis upon unity of style in the work of each student. Prerequisite: Dance 3 or equivalent study elsewhere. Admission with approval of the instructor. MRS. SOARES. M 6-8 p.m., F 11-1. Spring Term.

PHYSICS

PROFESSORS: HENRY A. BOORSE (Dean of the Faculty; 129 Milbank Hall), POLYKARP KUSCH

ASSOCIATE PROFESSOR: RICHARD M. FRIEDBERG (Chairman; 223 Milbank Hall)

ASSISTANTS:

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSORS: SAMUEL DEVONS, ¹HENRY M. FOLEY, WILLIAM W. HAVENS, JR., LEON M. LEDERMAN, ROBERT NOVICK, JAMES RAINWATER

ASSOCIATE PROFESSORS: PAOLO FRANZINI, SVEN HARTMANN

ASSISTANT PROFESSOR: CHARLES BALTAY

ADJUNCT PROFESSOR: ALFRED J. REDFIELD

A student intending to major in physics should begin her courses in the freshman year, starting with Physics C1006y, C1007x, C1009x, C1008y, C1010y. In special cases students who have begun with Physics 3-4 may continue as physics majors with a program to be worked out by the department. The first course for majors, C1006y, *is given in the spring*, to enable the student to complete the first term of the calculus sequence before beginning to study physics. Other courses to be taken subsequently by physics majors are arranged individually with the department; these should include four terms of the calculus sequence, or the equivalent, and one year of chemistry, though, in special cases, astronomy or biology may be substituted. The major examination consists of the Graduate Record Examination in physics and a one-hour oral examination.

The best opportunities for women in the field of physics are open to those with graduate training. Financial assistance is available to qualified graduate students in the form of fellowships, and teaching and research assistantships, offered by graduate schools throughout the country. For students both with and without graduate training many opportunities exist in laboratories operated by the federal government, e.g., by the Departments of the Navy, Air Force, and Army, the Atomic Energy Commission, the National Aeronautics and Space Administration, and the Public Health Service; in laboratories operated by state and local governments; and in laboratories operated by many industrial firms and research institutes. In particular, medical physics constitutes an important and growing field of specialization, while teaching in the public and private school systems offers challenging positions for those interested in education and public service.

C1001x, C1002y. Elementary Physics.

An introductory treatment of crucial experiments and theories of physics: particle mechanics; heat and kinetic theory of gases; electromagnetism; wave motion; atomic spectra and the Bohr theory of the hydrogen atom; nuclear reactions; elementary particles. A terminal course for

¹ On leave.

liberal arts students having no need for further scientific or professional training in physics. Prerequisite: high school mathematics through intermediate algebra. This course is not intended to fulfill the physics requirement for admission to medical school. Credit is not given for both Physics C1001-C1002 and Physics C1006, C1007, C1008. Registration for laboratory section is optional and will be limited to the capacity of the laboratory. PROFESSOR Tu Th 11-12:15. Discussion: 1 hour. Laboratory: hours to be arranged after first class meeting.

3-4. General Physics.

[7]

Autumn Term: Mechanics, heat, and optics. Spring Term: Electricity, magnetism, and modern physics. PROFESSOR and assistants. Lec. Tu Th 10:35-11:50. Three hours of laboratory and one recitation hour, to be arranged at the first meeting of the class. Laboratory is required of all students wishing to receive credit for the course.

C1006y. General Physics, I. Mechanics and Heat.

Fundamental laws of mechanics: kinematics; dynamics; work, energy, heat and thermodynamics. Prerequisite: Calculus I or the equivalent. Parallel: Calculus II or the equivalent. PROFESSOR Lec. M W F 9. Problem section: 2 consecutive hours to be arranged.

C1007x. General Physics, II. Electricity and Magnetism.

Electrostatics; direct currents; electromagnetism; alternating currents; wave motion. Prerequisite: Physics C1006. Parallel: Physics C1009 and Calculus III or the equivalent. PROFESSOR Lec. and recit. M W F 9.

C1008y. General Physics, III. Light and Atomic Physics.

Lenses and optical systems, interference and diffraction of light, atomic structure and spectra, nuclear phenomena, elementary particles. Prerequisite: Physics C1007. Parallel: Physics C1010 and Calculus IV or their equivalent. PROFESSOR Lec. Tu Th 9. Recit. 1 hour to be arranged after the first meeting.

C1009x, C1010y. Physical Laboratory.

Selected quantitative experiments in mechanics, heat, electricity, optics, and atomic and nuclear physics. Prerequisite: Physics C1006. Parallel: Physics C1007-C1008 or C1107-C1108. PROFESSOR Three consecutive hours of laboratory to be arranged after the first lecture in Physics C1007 and C1008 or C1107-C1108.

C1107x. General Physics, II. Electricity and Magnetism.

Open only to students selected by the department on the basis of their performance in Physics C1006. The list of students who have been selected is posted on the main floor of Pupin before the start of the Autumn Term. Prerequisite: Physics C1006. Corequisite: Physics C1009 and Mathematics C1201 or C1023, or their equivalents. PROFESSOR Lec. and recit. M W F 9.

C1108y. General Physics, III. Light and Atomic Physics.

A continuation of Physics C1107. Open only to selected students. Prerequisite: Physics C1107. Corequisite: Physics C1010 and Mathematics C1202 or C1204. Lec. Tu Th 9. Recit. 1 hour to be arranged after the first meeting.

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C1021x, C1022y. General Physics.

Mechanics, heat, electricity, magnetism, light, and modern physics. Intended primarily for freshmen with special ability in mathematics and physics. Prerequisite: advanced placement in mathematics or some knowledge of differential and integral calculus, and the permission of the departmental representative. (Special interviews are held during Freshman Week.) Corequisite: Physics C1009, C1010. PROFESSOR Tu Th 1:10-2:25. Problem section: 1 hour, to be arranged. ranged.

W3003x. Mechanics.

Newtonian mechanics; conservative forces and potentials; oscillations; central forces. Prerequisite: general physics and integral calculus. PROFESSOR M W F 10.

W3007x, W3008y. Theory of Electricity and Magnetism.

A discussion of the phenomena of electrostatics, current flow, and electromagnetism, and the description of these phenomena in mathematical terms. The treatment is directed toward the formulation of Maxwell's equations and includes some application of general principles to phenomena associated with lumped-impedance circuits, transmission lines and plane electromagnetic waves. Prerequisite: an introductory course in electricity and magnetism (Physics C1007 is equivalent) and differential and integral calculus. PROFESSOR KUSCH. Lec. Tu Th 8:35-9:50.

W3072y. Seminar in Current Research Problems.

A detailed study of a selected field of active research in physics. The motivation, techniques, and results obtained to the present, as well as the difficulties and unsolved problems. Prerequisite: Permission of the department representative. PROFESSOR Th 4:10-5:25.

W3081x, W3082y. Intermediate Laboratory Work.

Experiments are available in geometrical and physical optics, vacuum tubes and their circuits, atomic physics, and nuclear physics. An individual program of experiments is arranged for each student in accordance with her interests and previous experience. Immediately after registration and not later than the end of the second day after the beginning of classes, registrants should consult the staff member in charge about assignment to a laboratory section and the schedule of experiments to be performed. PROFESSOR One four-hour laboratory period weekly. Hours to be arranged by the instructor. Laboratory sections: M Tu W F 1:10-5; Th 6:30-10:30 p.m.

GRADUATE COURSES

For further information, see the Announcement of the Graduate Faculties.

G4003x. Lagrangian Mechanics.

Generalized coordinates; Lagrange's and Hamilton's equations with applications including rigid bodies. Normal coordinate treatment of coupled systems. Prerequisites: integral calculus and differential equations and Course W3003 or equivalent. PROFESSOR Tu Th 2:40-3:55. Problem session optional; hours to be arranged.

G4009y. Light.

Physical and geometrical optics. Prerequisite: general physics and integral calculus. PROFESSOR M W 4:10-5:25.

G4013x. Thermodynamics and Elementary Statistical Mechanics.

General principles of thermodynamics; the two fundamental laws; entropy, free energy; thermodynamic potentials. The Maxwell-Boltzmann, Fermi-Dirac, and Einstein-Bose distributions. The relation of thermodynamics to statistical mechanics. Prerequisite: Physics W3003 and W3007; parallel, Physics G4015. PROFESSOR M W F 11.

G4015x, G4016y. Atomic Physics and Introductory Quantum Mechanics.

Spectroscopic and other phenomena which form the experimental basis of modern atomic physics. The interpretation of atomic structures and radiation phenomena in terms of the quantum theory. Elementary wave mechanics is developed and applied to simple atomic structures and to potential well and barrier problems. Atoms in applied fields and the interactions in many electron atoms are treated by perturbation theory. The theory of spin and angular momentum. Prerequisite: Physics C1006, C1007, C1008, or their equivalents, and two additional terms of course work in intermediate or advanced physics. PROFESSOR M W F 9. Problem session optional; hours to be arranged.

G4040y. Nuclear Physics.

An introductory course in nuclear physics. General properties of nuclei, the systematics of stable nuclei, the two-body problem at low energies and nuclear forces, alpha radioactivity, beta decay, emission of electromagnetic radiation and selection rules, nuclear shell structure, phenomena associated with the passage of nuclear radiations through matter and methods of detection, high-energy accelerators, nuclear reactions and artificial radioactivity, neutrons and nuclear fission, properties and interaction of mesons. Prerequisite: Physics G4015 or the equivalent. PROFESSOR Tu Th 11-12:15.

G6014y. Kinetic Theory and Statistical Mechanics.

Boltzmann gas theory and the approach to equilibrium studied via the Boltzmann equation. Transport phenomena in liquids and solids; irreversible thermodynamics and the Onsager reciprocal relationships; Brownian motion, fluctuation and noise phenomena. Prerequisite: Physics G4003 and G4013 or their equivalents. M W 2:10-3:25.

PSYCHOLOGY

PROFESSOR: RICHARD P. YOUTZ (Chairman; 302C Milbank Hall)

ASSOCIATE PROFESSOR: BARBARA S. SCHMITTER

ASSISTANT PROFESSORS: EDWARD S. COBB, BARBARA MATES, THOMAS BIDDLE PERERA

ADJUNCT ASSISTANT PROFESSOR: RUTH L. RUTSCHMANN

LECTURERS: ALVIN L. ATKINS, LLOYD T. DELANY, LANNY FIELDS, JANE D. MOORMAN

ASSISTANTS: ELISSA N. CHASNOFF, ROBERT DAVID, MARJORIE S. ENGBER, DARCY B. KELLEY, MARION H. LEVINE, MARJORY SCHRAMM, SANDRA F. STINGLE

A major in psychology: The student majoring in psychology studies the basic principles, methods, and findings of psychology and is introduced to their most important applications.

The groupings of courses given below are arranged in accordance with varying interests; the student should select one of the plans (a), (b), or (c). The student is also advised to consult the catalogue of Columbia College for relevant courses. Courses offered in the School of General Studies may be acceptable for Barnard degree requirements but, at present, require additional fees. Columbia and General Studies space limitations may restrict the availability of these courses to Barnard students. In addition to the offerings listed in the announcement, advanced senior students with special interests may take appropriate courses in graduate school.

A student completing this major will have a good general background for activities in psychology or related fields, such as education, business, school psychology, psychometrics, personnel and social work, and similar areas. The major may be completed by fulfilling the following requirements:

Psychology: Courses 1, 5, 8, 9, one, or both, of 57 and 68; and other courses selected in consultation with the major adviser to complete the required 8 courses in the department.

Other fields: One course in philosophy, or Anthropology 1-2; a one-year laboratory course in biology, physics, or chemistry.

(a) Students who plan to obtain postgraduate professional training in clinical psychology, school psychology, vocational or rehabilitation counseling, or educational guidance should, in addition to the courses required for the major, include Courses 12, 16, 27, and at least two of the following: Courses 20, 21, 25, 33.

(b) Students interested in professional work in business or personnel should take Course 12 and may modify the requirements of the major so that the required work in other fields is as follows: Economics 1, 2; 17, 18; and F3451y.

(c) Students who wish to take postgraduate work in experimental psychology should add the following to the requirements for the general major: Courses 17, 57 and 68. In other fields work should include: full-year laboratory courses in two of the following: biology, physics, or chemistry; mathematics through Course 16.

The major examination: This consists of sections on: (1) general information and integration (three hours); (2) experimental design and techniques (one hour); and (3) areas of special interest (two hours). Students fulfilling any one of the four plans will have completed preparation for the major examination.

LABORATORY SCIENCE REQUIREMENT: The degree requirement in laboratory science may be satisfied by taking any two of the following courses: 5, 8, 12, 17, 20, 27, 30.

1x (or 1y.) Introduction to Psychology. [11]

An introduction to the chief facts, principles, and problems of human behavior, through systematic study of a text, lectures, exercises, brief participation in a current investigation, and reading in special fields. Prerequisite for all other courses. PROFESSORS COBB, MATES, PERERA, RUTSCHMANN, and YOUTZ.

Autumn Term				Spring Term			
Section I	M	W	F 9.	Section I	M	W	F 9.
Section II	M	W	F 11.	Section II	M	W	F 10.
Section III	M	W	F 1.	Section III	M	W	F 11.
Section IV	Tu	Th	10:35-11:50.	Section IV	Tu	Th	10:35-11:50.

5. Psychology of Learning. [8]

The basic methods, results, and concepts in the experimental analysis of learning. Laboratory work consists of experiments and demonstrations which mostly employ albino rats as subjects. Preparation of experimental reports is a major part of the course. Assignments deal mostly with experiments on infra-human organisms. Prerequisite: Course 1. PROFESSOR COBB and assistants. Lec. Tu Th 11. Lab. (1 hour lecture, 2 hours projects). M 1:10-4, Tu 2:10-5, Th 2:10-5.

8. Perception. [8]

An introduction to the problems, methods and results of studies in perceptual behavior. The literature will be surveyed; key experiments will be discussed in detail. Problems of definition and experimental method will be emphasized. In the laboratory students will conduct a series of typical experiments and will prepare systematic reports of their results. Prerequisite: Course 1 or the equivalent. Not open to freshmen. PROFESSOR PERERA and assistants. Lec. Tu Th 11. Lab. (1 hour lecture, 2 hours projects) M 1:10-4, Th 2:10-5.

9. Statistical Design. [2]

An introduction to statistics and experimental design in psychology and allied subjects. Descriptive statistics, probability, and elementary procedures of statistical inference will be treated. The laboratory will provide students with empirical demonstrations of theorems used, but not mathematically derived, in the lectures, together with practice in

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the application of elementary statistical methods. Prerequisite: Course 1 or the equivalent. PROFESSOR FIELDS and assistant. Lec. M W F 10. Lab. (2 hours) M 1:10-3, Tu 2:10-4.

- 12. Psychological Measurement.** [2]
Introduction to test theory, including concepts of item construction, standardization, reliability, validity, and motivation. Emphasis is on design and research related to major categories of current tests. Laboratory projects will be concerned with constructing and evaluating test items under experimental conditions, with assessing various methods of test administration, and with the quantitative procedures necessary for such evaluations and assessments. Prerequisite: Course 1 and one course in statistics. PROFESSOR MOORMAN and assistant. Lec. M W 10. Lab. (1 hour lecture, 2 hours projects) W 2:10-5, Th 2:10-5.
- 16. Theories of Learning.** [6]
A comparative study of the major accounts of the learning process. The course stresses the relation between each theory and the type and quality of research which is said to be generated by it. Seminar course limited to 20 students. Prerequisite: Courses 1, 5, and at least junior standing. PROFESSOR COBB. Tu Th 9:10-10:25.
- 17. Physiological Psychology.** [4]
An introduction to the study of the relationships between bodily processes and behavior. Emphasis is placed upon the basic anatomy and physiology of sensory and motor functions, motivation, emotion, learning, and behavior disorders. The laboratory consists of individual and group experiments in these areas of study, and exercises on the anatomy of sense organs and the brain. Prerequisite: Course 1. PROFESSOR PERERA and assistant. Lec. M W 1:10-2. Lab. (1 hour lecture, 2 hours projects) Tu 2:10-5, W 2:10-5.
- 20. Language and Speech Development and Disorders.** [4]
The psychological study of language and speech. Clinical and psycholinguistic consideration of language and speech perception, cognition, production, normal development, and pathology. Methods of experimental study, various theories, and problems are treated. Laboratory consists of experiments and projects, with systematic reports. Prerequisite: Course 1. PROFESSOR MATES and assistants. Lec. M W 1:10. Lab. (1 hour lecture, 2 hours projects) M 2:10-5, Tu 2:10-5.
- 21. Abnormal Psychology.** [4]
The field of psychopathology, history, more common forms of mental inadequacy and disturbance and their psychological interpretation, including principles of mental hygiene and psychotherapy. Each class takes two trips to institutions for demonstrations of psychoses and deficiencies. Open to juniors and seniors who have had Course 1. PROFESSOR YOUTZ. M W 1:10 and consultation in connection with readings.
- [24. Applications of Psychological Techniques.** PROFESSOR MATES.
Not given in 1969-70.]
- 25. Psychology of Personality.** [2]
Contemporary theories of the development and organization of personality and their relation to other forms of psychological theory. Points

PSYCHOLOGY

of view discussed include those of Freud, Adler, Jung, neo-Freudians such as Horney and Sullivan, and others, including Murray and Kelly. Consideration is given to clinical applications of the theories. Prerequisite: Course 1 or the equivalent. PROFESSOR SCHMITTER. M W F 10.

27. Developmental Psychology. [3]

Comparative and experimental analysis of developmental transitions from simple to complex behavior. Consideration of genetic and environmental factors. Emphasis on human ontogeny from conception to maturity. Laboratory includes observations, experiments, and demonstrations of sensori-motor, intellectual, linguistic, social, moral, and emotional development of children. Preference to juniors and seniors. Prerequisite: Course 1. PROFESSOR MATES and assistants. Lec. M W 11. Lab. (1 hour lecture, 2 hours projects) M 2:10-5, Tu 2:10-5.

30. Psychology of Thinking. [3]

Survey of contemporary experimental approaches to the understanding of concept formation and problem-solving behavior, derived from learning theory, psycho-linguistics, logic, and information theory. The laboratory will consist of experiments and demonstrations of thinking behavior in animals, children, and adults. Prerequisite: Course 5. PROFESSOR COBB and assistant. Lec. M W 11. Lab. (1 hour lecture, 2 hours projects) Tu 2:10-5, W 1:10-4.

38. Social Psychology. [6]

An introduction to the study of social behavior. Among the topics considered are social learning, interaction, group behavior, and verbal behavior. Experimental contributions to the understanding of social phenomena are emphasized. Prerequisite: Course 1. PROFESSOR ATKINS. Tu Th 9:10-10:25, and conference hour in connection with a project or paper.

39. Seminars on Special Topics: Psychological Analysis of Racism. [0]

Psychological factors influencing the development and expression of racist attitudes and actions, with special reference to black-white confrontation. Emphasis on psychoanalytic studies of hostility, anger, self-concept, mechanisms of defense, and other factors that produce and reduce racism. Each student will write an original research paper. Limited to 20 students. Prerequisite: Courses 1 and 25, or written permission of the instructor. PROFESSOR DELANY. M 2:10-4.

48x (or 48y). Individual Projects. [0]

Research projects will be planned in consultation with members of the department. Open to majors who have had Courses 5 and 8, on written permission of the member of the department who supervises the project. MEMBERS OF THE DEPARTMENT. Hours to be arranged.

57. Systems of Psychology. [8]

A comparative summary of the more influential schools and points of view in psychology, past and present. Each student prepares a paper reporting on an important person, institution, or subject matter area. Prerequisite: Courses 5 and 8 or the equivalent. PROFESSOR YOUTZ. Tu Th 11.

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68. Case Histories in Experimental Design. [8]

Discussion of stages in the experimental development of psychological concepts. Nonstatistical analysis of procedures and justifiable conclusions at stages of: speculation, measurement, observed relation, experiment, and theory construction. Application to articles in current journals, both experimental and clinical. Each student will choose an area of interest and prepare a paper reporting on its origins and present status. Prerequisite: Courses 5 and 8 or the equivalent. PROFESSOR YOUTZ. Tu Th 11.

The following Barnard courses may be of interest to majors. Some have prerequisites.

Anthropology V3027y (Culture and the Individual)

Biology 8 (Ecology)

Biology G4212y (Animal Behavior)

Linguistics 21, 22 (Introduction to Linguistics)

Sociology 45 (Social Structure and Personality)

RELIGION

PROFESSORS: THEODOR H. GASTER (Chairman; 27 Milbank Hall),
HAROLD STAHMER

ASSISTANT PROFESSOR: JOHN B. SNOOK

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD
STUDENTS:

PROFESSORS: JOSEPH L. BLAU, J. A. MARTIN, JR.

ADJUNCT PROFESSOR: JOHN MEYENDORFF

ADJUNCT ASSOCIATE PROFESSOR: DAVID WEISS

ASSISTANT PROFESSORS: J. STANLEY BARLOW, ROBERT F. OLSON,
PETER A. PARDUE, RONALD STONE

INSTRUCTORS: HENRY BOOKOUT, JR., CARL HESTER

The purpose of the program is to introduce the field of religion, to present the documents, history and thought of the great religious traditions of East and West, and to consider their influence upon contemporary questions.

The program of study for a major in religion is to be planned in consultation with members of the department by the end of the sophomore year. The student chooses one of two sequences of study: A. Western Religion and the Theory and Functions of Religion; B. Eastern Religion and the Theory and Functions of Religion.

Courses: Normally ten semester courses including V1101, V1102 and two semesters of seminar work. Students specializing in Sequence A should include a minimum of one semester in Eastern Religion and one semester in the Theory and Functions of Religion. Students specializing in Sequence B should include a minimum of one semester in Western Religion and one semester in the Theory and Functions of Religion. Students are expected to take four semesters of course-work in two related departments. All course selections must be made in conjunction with the major adviser. Students considering graduate work are strongly advised to develop a reading knowledge of such languages as Hebrew, Greek, Latin, and Chinese, depending on the area of concentration.

Majors in religion will be required in their last year to write a senior essay in conjunction either with their seminars or with Religion 35, 36. Both the subject matter as well as the development of the senior essay will be subject to departmental approval and supervision.

V1101x, V1102y (or V1102x, V1101y). Introduction to the Study of Religion.

The phenomenology of religious experience and the historical forms of religious life. A study of the presuppositions, data and documents of the religions of East and West. Autumn Term: The ancient religions of the Near East and Greece; major themes in Judaism and Christianity. Spring Term: Recurrent themes in religions of the East.

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MEMBERS OF THE DEPARTMENT.

Section I M W 2:10-3:25. PROFESSOR BARLOW.

Section II Tu Th 10:35-11:50. (Primarily for Barnard students.) PROFESSOR GASTER.

Section III M W 5:40-6:35. Autumn Term: MR. HESTER; Spring Term: MR. BOOKOUT.

Section IV Tu Th 9:10-10:15. PROFESSOR BLAU.

Section V Tu Th 2:10-3:25. PROFESSOR PARDUE.

Section VI M W F 9. (Primarily for Barnard students.) PROFESSOR SNOOK.

Section VII M W 11:00-12:15. (V1102x, V1101y.) For those wishing to begin the course with the study of Eastern religions. PROFESSOR OLSON.

WESTERN RELIGION

V1001x & y. Major Topics in the Study of Religion.

A one-semester introduction to the theory and practice of religion in the East and West, emphasizing such topics as myth and ritual, reason and revelation, law and community, mysticism and radical theology, the role of symbolism, the concept of the sacred.

Section I Tu Th 10:35-11:50 (both terms). (Primarily for Barnard students.)

Autumn Term: PROFESSOR STAHLER.

Spring Term: PROFESSOR GASTER.

Section II Tu Th 10:35-11:50 (both terms).

Autumn Term: PROFESSOR STONE.

Spring Term: PROFESSOR MARTIN.

V3201x. Introduction to the Old Testament.

An introduction by means of modern critical methods of study to the religion, literature and history of Israel in the Old Testament period.

Section I Tu Th 9:10-10:25. (Primarily for Barnard students.) PROFESSOR GASTER.

Section II Tu Th 6:10-7:25 p.m. Instructor to be announced.

V3202y. Introduction to the New Testament.

An introduction by means of modern critical methods of study to the religion, literature and history of the Christian movement in the New Testament period.

Section I M W F 2:10-3. (Primarily for Barnard students.) PROFESSOR SNOOK.

Section II Tu Th 5:40-6:55 p.m. MR. BOOKOUT.

W3214y. Introduction to Talmudic and Geonic Literature.

Documents in the history of post-Biblical Jewish literature. Selections from Mishna, Mechitta, Midrash, Gemara, and Geonic literature. PROFESSOR WEISS. M W 1:10-2:25.

V3204y. Early Christianity in the Light of the Classical Heritage.

The Church in the world of the Roman Empire. The transformation and incorporation of Greek and Roman religion and philosophy by the Church Fathers. MR. BOOKOUT. M W 2:10-3:25.

RELIGION

15, 16. History of Religious Thought in the West. [7]

15: Representative religious thinkers from Augustine to Ockham, with emphasis on the faith-reason and universal controversies, the presuppositions of medieval theology, and the significance of the trivium and of chiliastic writings. PROFESSOR STAHER. Tu Th 10:35-11:50.

16: Representative religious thinkers from the Renaissance to 1900, with emphasis on attitudes toward Biblical translation, language, millenarian tendencies, and the presuppositions of selected religious communities and theological systems. PROFESSOR HESTER.

[17, 18. Western Religious Institutions. PROFESSOR SNOOK.

Not given in 1969-70.]

[W3242y. Eastern Christian Thought. PROFESSOR MEYENDORFF.

Not given in 1969-70.]

W3234y. Catholic Thought after Trent.

Catholic thought from Newman to the present. Recent and current developments in the arts and the liturgy, and in philosophy, psychology and theology. The Second Vatican Council and its consequences. Hours to be arranged. Instructor to be announced.

W3233x-W3234y. History of Judaism.

History of the Jewish religion from its beginnings to contemporary manifestations in Israel and the United States.

W3233x: Early background and formation of Judaism.

W3234y. From the Rabbinic period to the present.

PROFESSOR BLAU. Tu Th 4:10-5:35 (both terms).

[31. Ancient Near Eastern Religions. PROFESSOR GASTER.

Not given in 1969-70.]

Archaeology-Religion G4169x-G4170y. Archaeology of the Bible.

G4169x: Archaeology of Palestine in the Iron Age (1100-332 B.C.). The sites which provide important information concerning the background of biblical religion.

G4170y: Maccabaeon and New Testament times. A survey of Hellenistic and Greco-Roman sites in Syria, Palestine, the Phoenician littoral and Arabia, with special attention to remains which are of religious significance. Prerequisite for Barnard students: permission of the department.

PROFESSOR TEIXIDOR. W 4:10-6 (both terms).

EASTERN RELIGION

W3251x. History of Hinduism.

The relationship between Hindu religious values and Indian social institutions. Problems of defining "Hinduism" within the wider range of India's cultural life, and its development in dialogue with other religions and ideologies in its environment. Prerequisite: Course V1102 or permission of the instructor. PROFESSOR PARDUE. Tu Th 11:00-12:15.

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W3252x. History of Buddhism.

Change and continuity in the development of Buddhist thought and institutions during the expansion of Buddhism from India to Tibet, China, and Japan. Prerequisite: Course V1102 or permission of the instructor. PROFESSOR OLSON. Tu Th 2:10-3:25.

W3302y. History and Sociology of Buddhism in South-East Asia.

The developing role of religion in the societies of Burma, Thailand, Cambodia, Laos and Vietnam, with an analysis of forms of religious life and thought. PROFESSOR PARDUE. Tu Th 11:00-12:15.

W3253y. Chinese and Japanese Religious Thought.

Native religious and philosophical movements and Buddhist developments in China and Japan. PROFESSOR OLSON. M W 2:10-3:25.

THEORY AND FUNCTIONS OF RELIGION

25y. Religion in Contemporary Society.

[9]

The place of religious institutions in contemporary America. Consideration will be given to historical antecedents of the present situation, characteristics of the major types of existing institutions, and to some of the problems and possibilities posed by new forms of religious group life. Term paper optional. Open to all except freshmen. PROFESSOR SNOOK. Tu Th 2:10-3:25.

26. Religion in Contemporary Culture.

[9]

Religion, its meaning and expression in contemporary culture, with special emphasis on recent theological, literary and philosophical trends which affect institutional and personal religious practices and attitudes. Term paper optional. Open to all except freshmen. PROFESSOR STAHLER. Tu Th 1:10-2:25.

Religion-Sociology G4400x. Sociology of Religion.

Major theoretical approaches to the relationship between religious values and social institutions in readings from Durkheim, Pareto, Malinowski, Marx, and Max Weber. Problems in comparative evaluation of religious systems and their social and cultural consequences. Prerequisite: junior or senior standing and work in either religion or sociology. PROFESSOR PARDUE. W 1:10-3.

[Anthropology V3042y. Primitive Religion. PROFESSOR VINCENT.

Not given in 1969-70.]

[G4401y. Role of Language in Religious Existentialism. PROFESSOR

STAHLER.

Not given in 1969-70.]

SEMINARS

Students who are not religion majors must obtain the permission of the department.

[G4411x. Methodology in the Study of Religion. PROFESSOR MARTIN.

Not given in 1969-70.]

W3502x. Methodology in the Study of Religion.

The methodological concepts involved implicitly and explicitly in various approaches to the study of religion; the implications and consequences of these concepts for inquiry into the field of religion. PROFESSOR SNOOK. W 3:10-5.

W3503x, W3504y. Religious Thought.

W3503x:

Section I Ancient Religions.

An examination of the religious concepts, practices and myths of the Ancient Near East and of Greece and Rome, with special reference to comparative religion and folklore. The relevant texts are read in translation. PROFESSOR GASTER. Tu 3:10-5.

Section II Interpretation of the Protestant Ethic.

An examination, using selected texts from Max Weber to the present, of the thesis that there is a religious factor in the dynamics of Western culture. PROFESSOR SNOOK. M 2:10-4.

W3504y:

Section I Mysticism.

An examination of selected mystical literature of the East and West, theistic and non-theistic. PROFESSOR ULANOV. M 2:10-4.

Section II Topic, hour, and instructor to be announced.

READING COURSE

35, 36. Guided Reading and Research.

[0]

A program of study designed to give outstanding majors an opportunity to pursue independently a subject of their choosing. A written essay is required of students taking this program. Consultation periods to be arranged with adviser. MEMBERS OF THE DEPARTMENT.

RUSSIAN

ASSOCIATE PROFESSOR: RICHARD F. GUSTAFSON (Chairman; 23 Milbank Hall)

ASSISTANT PROFESSOR: MARINA LEDKOVSKY

ASSOCIATES: ANATOL K. SAPRONOW, MARIANNA SAPRONOW, ZOYA TRIFUNOVICH

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSORS: WILLIAM E. HARKINS, RUFUS W. MATHEWSON, JR.

ASSOCIATE PROFESSOR: ROBERT L. BELKNAP

ASSISTANT PROFESSOR: JOHN MALMSTAD

INSTRUCTOR: NICHOLAS OZEROV

ASSOCIATE: ROSE RASKIN

The Russian Department offers courses in both language and literature. Besides a full four-year sequence in language work, there are specialized courses in major Russian authors and important periods in Russian literature. Students should consult Mr. Gustafson in choosing language courses beyond the second year. For those who know no Russian, the department also gives a series of courses in Russian literature taught in English.

The major in Russian at Barnard is a liberal arts program designed to help the student obtain reasonable fluency in the spoken and written language, a reading command of Russian adequate for interpreting literary texts, and a comprehensive knowledge of Russian literature, especially of the nineteenth and twentieth centuries. Students will be encouraged to take one year of Russian history and to select relevant courses in philosophy, art, music, and other literatures. The requisites to the major, in most cases to be completed before the junior year, are Russian 4 (or its equivalent) and Russian V1225x, V1226y. The minimum for the major is 8 courses in language and literature. No courses with readings exclusively in English may be included in the minimal major program. Normally majors are required to take Russian V3333x, V3334y; V3595x, V3596y; and two fourth-year language courses. A senior essay is required as part of the senior seminar.

FOREIGN LANGUAGE REQUIREMENT FOR THE DEGREE: All students must take a placement examination before entrance. This examination tests the student's knowledge of grammar, her comprehension of written and spoken Russian, and her ability in free composition. Students receiving a sufficiently high grade will automatically fulfill the requirement. All others must complete a full third-year course in language or literature, or one semester of such a course with a minimum grade of B+.

LANGUAGE COURSES

1-2. Elementary Full-Year Course.

[16]

Grammar, reading, composition. Oral practice in small groups. Language analysis: PROFESSORS GUSTAFSON and LEDKOVSKY. Section I

M W F 10. Section II M W F 12:10. Oral practice: MR. and MRS. SAPRONOW. M W F 9, M W F 11, M W F 1:10, M W F 2:10, M W F 3:10. Other hours to be arranged.

3-4. Intermediate Course.

[16]

Grammar review, composition, reading. Oral practice in small groups. Language laboratory work required. Prerequisite: Course 2 or the equivalent. Language analysis: MRS. TRIFUNOVICH. Section I M W F 10. Section II M W F 12:10. Oral Practice: MR. and MRS. SAPRONOW. M W 10, M W 11, Tu Th 9, Tu Th 10, Tu Th 11.

V3331x, V3332y. Readings in Russian Literature.

Emphasis on conversation and composition. Reading and discussion of selected texts from nineteenth and twentieth-century Russian literature. Lectures, papers, and oral reports. Conducted entirely in Russian. Prerequisite: two years of Russian or the instructor's permission. PROFESSOR LEDKOVSKY. M W F 1:10.

V3335x, V3336y. Advanced Language Course, Third Year.

Emphasis on problems of modern Russian usage and grammar. Designed to acquaint the student with various modes of the written and spoken language. Prerequisite: two years of Russian or the instructor's permission. MR. OZEROV. M Tu W Th F 2:10.

V3443x, V3444y. Advanced Russian: Syntax and Style.

Autumn Term: Systematic study of problems in Russian syntax; written exercises, translations into Russian, and compositions. Spring Term: Discussion of different styles and levels of language, including word usage and idiomatic expressions; written exercises, analysis of texts, and compositions. Conducted entirely in Russian. The second term may be taken without the first. Prerequisite: three years of Russian or the instructor's permission. MRS. TRIFUNOVICH. M W F 2:10.

9, 10. Oral and Written Russian: Advanced Course.

[4]

Selected texts in philosophy, criticism, and literature of twentieth-century Russia are read to provide a context for discussion. Lectures and reports on music, architecture, and painting of the modern period. Frequent compositions. Conducted entirely in Russian. Recommended for students who wish to improve their active command of Russian. The second term may be taken without the first. Prerequisite: three years of Russian or the instructor's permission. MR. SAPRONOW. M W 1:10. Third hour to be arranged.

LITERATURE COURSES

For nonmajors, courses marked thus § will count toward the general college requirement.

V1225x, V1226y. Survey of Russian Literature.

Literature from Pushkin through the modern period, with emphasis on the prose masterpieces of the nineteenth century. The second term may be taken without the first. A knowledge of Russian is not required. PROFESSOR MALMSTAD. M W F 11.

V1227y. Tolstoy and Dostoevsky.

Analysis of the major works of the two writers. A knowledge of Russian is not required. PROFESSOR HARKINS. M W F 12.

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[V1229x. Russian Drama and Theatre. Not given in 1969-70.]

§V3333x, V3334y. Introduction to Russian Literature.

Emphasis on reading and literary analysis. Close study of representative works of Russian literature from Pushkin to the modern period. Conducted mainly in Russian. Examinations in English. Prerequisite: a grade of B— or better in Course 4 or the instructor's permission. PROFESSOR LEDKOVSKY. M W F 10.

[§V3461y. Pushkin.

PROFESSOR GUSTAFSON. Not given in 1969-70. To be offered in 1970-71.]

V3462y. Gogol.

A close study, in the original, of the major works. Prerequisite: three years of Russian or the instructor's permission. PROFESSOR MALMSTAD. Tu Th 11-12:15.

[§V3463x. Tolstoy.

PROFESSOR GUSTAFSON. Not given in 1969-70. To be offered in 1970-71.]

V3464x. Dostoevsky.

A close study, in the original, of Dostoevsky's shorter fiction. Prerequisite: three years of Russian or the instructor's permission. PROFESSOR BELKNAP. Tu Th 1:10-2:25.

[§V3467y. Twentieth-Century Prose Writers.

PROFESSOR MAGUIRE. Not given in 1969-70.]

§W3867x. Readings in Russian Poetry.

Extensive readings in Russian poetry from the second half of the eighteenth century to the present. Conducted partly in Russian. Prerequisite: three years of Russian or the instructor's permission. MISS RASKIN. M F 4:10-5:25.

V3595x, V3596y. Seminar.

Autumn Term: Readings and short papers on a specialized topic in Russian literature. Spring Term: Supervised individual research, culminating in a critical paper. The second term may be taken without the first. Prerequisite: senior standing and the instructor's permission. V3595x: PROFESSOR MATHEWSON. V3596y: PROFESSOR BELKNAP. Th 3:10-5.

GRADUATE COURSES

Certain graduate courses given at Columbia University are open to qualified majors with the consent of the instructor and the major adviser. A description of these courses will be found in the Announcement of the Graduate Faculties.

G4016y. Twentieth-Century Russian Drama and Theater.

PROFESSOR SEGEL. Tu 2:10-4.

G4103x. History of the Russian Language: Introductory Course.

PROFESSOR UNBEGAUN. F 2:10-4.

G4462y. Chekhov and the Drama.

PROFESSOR MATHEWSON. Tu Th 11.

SOCIOLOGY

PROFESSORS: ¹BERNARD BARBER (Chairman; 404 Lehman Hall), MIRRA KOMAROVSKY
ASSOCIATE PROFESSOR: GLADYS MEYER
ASSISTANT PROFESSOR: ETHNA LEHMAN
RESEARCH ASSOCIATES: JOHN LALLY, DANIEL SULLIVAN

Sociology introduces students to the scientific study of society. The basic problems common to all human societies and the varied institutional solutions to these problems make up one large area of sociological interest; hence the sociological study of the family, social class, economic and political institutions, religion, science, ideology, etc. The study of rural and urban communities, human relations in groups, social structure and personality are other areas of sociological interest. So also is the understanding of social change. Sociology is concerned not only with the normal functioning of social institutions but also with social problems such as racial and minority problems, industrial conflict, crime, and other areas of social disorganization. In studying these subjects, materials about American society are given primary emphasis. However, comparative materials from other societies, preliterate and more highly developed, are extensively used. Finally, sociology seeks to acquaint students with its methods of investigation, from which students can learn important facts about scientific method in general. A student majoring in sociology will be required to take: Course 1, 2 and other sociology courses to be selected in consultation with the major adviser. Courses 32, 33, 34, 39, 40, 41, 42, 43, 44 are strongly recommended. For those students entering the major in 1970-71, 41 and 43 will be required in their junior year.

Major examination: A three-hour written examination in addition to the Graduate Record Examination. Those students writing long papers in sociology in their senior year may be excused from taking G. R. E.

1, 2. Introduction to Sociology.

An introduction to sociological analysis with emphasis on contemporary American society. Autumn Term: The structure of society. The family and the other major social institutions; class stratification; social groups; ecology of modern communities. Spring Term: Social change and social problems. Population, race and group conflict, social disorganization and crime. Problems of social reorganization. Open to freshmen. Course 1 is a prerequisite to Course 2. PROFESSORS KOMAROVSKY, LEHMAN, and MEYER.

Section I M W F 10. (2) Section III M W F 2:10. [5]
Section II M W F 11. (3) Section IV Tu Th 9:10-10:25. [6]

2x. Introduction to Sociology.

Same as Course 2. Starting in 1970-71, 1-2 will be given as an indivisible lecture course. Therefore, all students wishing to take 2 as a separate course must do so this year.

Section I Tu Th 9:10-10:35. [6]

¹ Absent on leave, 1969-70. Please consult Mrs. Lehman on routine matters.

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- 21. Poverty and the State.** [3]
Conceptualizations of poverty and their effect on public policy. An analysis of tax supported welfare and anti-poverty programs. Comparative study of the philosophy, structure, and coverage in the U.S., England and France. Open to juniors and seniors. Term paper or field work required. Prerequisite: Course 1. PROFESSOR MEYER. M W F 11.
- 22. Introduction to Social Work.** [3]
The growth of the profession. Intellectual influences which have shaped its development. The traditional fields of practice. The structure and function of voluntary agencies. Open to juniors and seniors. Prerequisite: two courses in social science other than history. Field work or a paper is required. PROFESSOR MEYER. M W 11.
- 32. The Family.** [2]
A study of the American family using comparative materials from other societies. The family cycle with special emphasis upon the marriage relationship. Ethnic and class differences. Implications of changing family patterns for other social institutions and for the individual. Prerequisite: Course 1, 2. PROFESSOR KOMAROVSKY. M W F 10.
- 33y. The Community.** [7]
Analysis of community structures in the light of the rising urban dominance. Classical and current community research is evaluated. Problems of power and policy. Prerequisite: Course 1, 2. PROFESSOR MEYER. Tu Th 10:35-11:50.
- 34x. American Minorities.** [5]
The composition and distribution of minority groups in the U.S. The structure of dominance; minority adaptations to dominance; the impact of minorities upon the Establishment; the politics of confrontation. Term paper required. Prerequisite: Course 1, 2. PROFESSOR MEYER. M W F 2:10.
- [38. **Special Readings.** PROFESSOR KOMAROVSKY. Not given in 1969-70.]
- [39. **Comparative Social Institutions.** PROFESSOR BARBER.
Not given in 1969-70.]
- 40. Social Stratification.** [2]
General theory of social stratification. Comparative materials from other civilized (China, India, medieval Europe) and contemporary (U.S., Soviet Russia, England, France) societies. Current processes and change emphasized. Prerequisite: Course 1, 2, or permission of the instructor. PROFESSOR LEHMAN. M W F 10.
- 41, 42. History of Sociological Theory.** [8]
The major contributions of Comte, Spencer, Sumner, Cooley, Durkheim, Simmel, Weber, Mannheim, Sorokin, Parsons, Merton, and other contemporary American sociologists. Prerequisite: Course 1, 2. PROFESSOR KOMAROVSKY. Tu 10:35-12:15.

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- 43, 44. Methods of Sociological Research. [9]**
Various qualitative and quantitative methods of social research are presented both from a logical and a sociological point of view. Lectures, critical reading of studies in conjunction with field work exercises. Prerequisite: Course 1, 2. Course 43 is prerequisite for Course 44, except by special permission of the department. Tu 2:10-4.
- 46. Social Structure and Personality. [9]**
Critical examination of the theory and research studies dealing with relations between social structure and personality. Prerequisite: Course 1, 2. Term paper required. Tu 2:10-4.
- 47. Social Movements. [2]**
Various types of social movements, their organization, ideologies and relationship to social change. Social-psychological bases of participation. Substantive materials drawn from historical sources and current developments in the United States. Prerequisite: Course 1, 2. PROFESSOR LEHMAN. M W F 10.
- 48. Black Americans in the Twentieth Century. [5]**
Patterns of interaction between black Americans and white society from the founding of the NAACP to the death of Martin Luther King. Term paper required. Guest lecturers. Not open to freshmen. PROFESSOR MEYER. M W F 2:10.
- 87. Individual Projects for Seniors.**
With the permission of the instructor, seniors will work on special projects individually and also come together occasionally in seminar meetings. Term paper required. Enrollment limited to 8. Tu 2:10-4.
- 97. Senior Seminar. [0]**
The City: Structures and problems of metropolitan social organization. Individual research projects. Prerequisite: Course 33 or permission of instructor. PROFESSOR MEYER. Tu 2:10-5.

COURSES IN OTHER DIVISIONS OF THE UNIVERSITY

The following Columbia College courses in areas not offered at Barnard College are open to qualified juniors and seniors:

Sociology C3666x. Political Sociology. PROFESSOR SILVER.

Sociology C3333x. Social Interaction. PROFESSOR WULBERT.

SPANISH

PROFESSORS: MARGARITA UCELAY (Chairman; 17 Milbank Hall)

ASSISTANT PROFESSORS: MARIA DE ORTI, MIRELLA DE SERVODIDIO

INSTRUCTORS: LAMBERTO CANO, LUZ CASTANOS, RANDOLPH POPE

VISITING PROFESSOR: GIUSEPPE SANSONE

A major in Spanish is designed to enable the student to understand, speak, and write the language with ease, have a general knowledge of the history and cultural development of Spain and the Spanish-American world, with a more profound knowledge of the literature and art of Spain and the Hispanic Republics. A student should concentrate at the same time either on a literary genre, whether it be poetry, the novel, or the theater; or a period, classical or modern.

A student majoring in Spanish will be required to take Courses 13, 14; 17, 18; 20; 23; 25, 26; 31, 32, and the senior seminar (33). Courses 1-2; 3-4; 5, 6; 7, 8 and 11, 12 do not count toward the major requirement.

Other fields: The following courses are recommended: Anthropology V3029y; Classical Literature 32; Art History 75, 76; French 21-22; German 55; 56; Italian V3333x-V3334y; Philosophy 1; Religion V1101x. A major in Spanish must broaden her study of Spanish culture by relating it to other cultures which have influenced it or been influenced by it.

The major examination consists of a three-hour written examination on Spanish literature; a three-hour written examination on Hispanic civilization and Spanish-American literature; and a half-hour oral examination on literature and culture. All examinations are conducted in Spanish.

FOREIGN LANGUAGE REQUIREMENT FOR THE DEGREE: All new students who intend to satisfy the foreign language requirement in Spanish must take a placement examination before registration. The student will be tested in her knowledge of grammar and her ability to understand, speak, and write Spanish. Those who receive a sufficiently high grade will automatically fulfill the requirement. All others may do so by completing Course 7, 8, or Course 7 with a minimum grade of B+.

LANGUAGE COURSES

1-2. Elementary Full-Year Course.

[16]

Grammar, reading, conversation. May not be taken parallel to elementary Italian. Laboratory work is required. MR. CANO, MISS CASTANOS and MR. POPE. Section I M Tu W Th F 9. Section II M Tu W Th F 10. Section III M Tu W Th F 2:10.

3, 4. Intermediate Course.

[16]

A rapid review of grammar and syntax, conversation, and reading, discussion and analysis of important works in Spanish and Spanish-American literatures. Monthly book reports on outside reading. MR. CANO and MISS CASTANOS. Section I M W F 10. Section II M W F 1:10.

5, 6. Advanced Course in Grammar and Composition. [3]

Given for students who have had three years of high school Spanish. Emphasis on oral self-expression and written compositions on outstanding novels and poetry. Monthly book reports on outside reading. MR. CANO. M W F 11.

7, 8. Spanish through Literary Analysis. [16]

Readings in twentieth-century works as a basis for improving the comprehension of written and spoken Spanish. Special emphasis on syntax and translation. Weekly compositions. Prerequisite: Courses 3, 4 or 5, 6. PROFESSORS ORTI and SERVODIDIO, MISS CASTANOS and MR. POPE. Section I M W F 10. Section II M W F 11. Section III M W F 1:10.

[9, 10. Intermediate Spanish Conversation. Not given in 1969-70.]

11, 12. Oral Spanish, Advanced Course. [0]

Discussion based on contemporary Hispanic writers and literary trends, and on Spanish painters; practice in the recitation of poetry and plays. Prerequisite: Courses 3, 4 or 5, 6, or permission of instructor. To be taken as a fifth course only. MR. POPE. M W F 2:10.

LITERATURE COURSES¹

For nonmajors courses marked thus § will count toward the general college requirement.

13y. The Culture of Spain. [5]

The history and culture of Spain. A study of the origins and evolution of Spanish character, tradition, and thought. The interrelationship of its history and arts and the scope of its contribution to Western culture. Lectures and monthly book reports. The use of audio-visual materials will be stressed. Prerequisite: Courses 3, 4, or 5, 6, or 7, 8. PROFESSOR ORTI. M W F 2:10.

14. Spanish-American Culture. [3]

The history and culture of Spanish America. A study of the origins and evolution of the Spanish-American character, tradition, and thought. The interrelationship of its history and arts. Lectures and monthly book reports. The use of audio-visual materials will be stressed. Prerequisite: Courses 3, 4, 5, 6, 7, 8. MR. POPE. M W F 11.

§15-16. Introduction to Spanish Literature. [3]

Lectures on the history of Spanish literature, reading, reports, and discussion of the outstanding works and authors up to the twentieth century. Not open to majors. This course is not divisible under any circumstances. Prerequisite: Courses 3, 4, or 5, 6, or 7, 8. PROFESSOR ORTI. M W F 11.

§17. Spanish Literature in the Middle Ages and the Renaissance. [7]

Spanish literature from its origins to the end of the Renaissance. Monthly book reports on novels or dramas. Intended for students majoring in Spanish and nonmajors fluent in the language. Open also

¹ All courses are conducted entirely in Spanish except Course V1134y.

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to qualified students on written permission of the instructor. Not open to those who have taken Course 15-16. Prerequisite: Courses 3, 4, or 5, 6, or 7, 8. PROFESSOR UCELAY. Tu Th 10:35-11:50.

§18. Spanish Literature from the Golden Age to the Enlightenment. [7]

Lectures, reading and discussion. Monthly written reports. Intended for students majoring in Spanish and nonmajors fluent in the language. Open also to qualified students on written permission of the instructor. Not open to those who have taken Course 15-16. Prerequisite: Courses 3, 4, or 5, 6, or 7, 8, or 17. PROFESSOR Tu Th 10:35-11:50.

§20. Don Quixote. [9]

Lectures, reading, and discussion. Monthly book reports on the outstanding critics of Cervantes' masterpiece. Prerequisite: Courses 15-16, 17, 18 or written permission of the instructor. PROFESSOR UCELAY. Tu Th 2:10-3:25.

[§21-22. The Spanish Drama. PROFESSOR UCELAY. Not given in 1969-70.]

§23. Nineteenth Century Literature in Spain. [9]

Romantic drama and poetry; the realistic novel. A term paper on Galdós. Prerequisite: Courses 15-16 or 17, 18, or the written permission of the department. PROFESSOR UCELAY. Tu Th 2:10-3:25.

§25, 26. Contemporary Spanish Literature. [2]

Autumn Term: characteristics, technique and style of the writers of the generation of '98 from Unamuno to Juan Ramón Jiménez. (Baroja, Valle Inclán, Azorín, Benavente and A. Machado will be specifically studied.) Two papers. Spring Term: the ideas, trends, and new literary concepts from Ortega y Gasset to the present-day writers. (Special attention will be given to Pérez de Ayala, Miró, Gómez de la Serna, Salinas, Guillén, García-Lorca and Alberti.) Two papers. Prerequisite: Courses 15-16 or 17, 18 or the written permission of the instructor. Autumn Term: PROFESSOR ORTI. Spring Term: PROFESSOR SERVODIDIO. M W F 10.

[§27. Spanish Poetry. Not given in 1969-70.]

§31-32. Spanish-American Literature. [4]

Lectures and study of the main literary works up to the present time. Book reports on the principal novels. The course is not divisible under any circumstances. Prerequisite: Courses 13, 14, 15-16, 17, 18, or the written permission of the department. M W F 1:10.

33. Senior Seminar. [0]

Intended to supplement or coordinate the work done in other courses and to introduce the student to the methods of scholarly research. Open only to seniors. PROFESSOR ORTI. M W F 2:10.

C3811x-C3812y. Latin-American Seminar.

A seminar which examines the mainsprings of civilization and cultural change in Latin America. Designed for senior majors in Latin-American Areas. PROFESSOR DE MORELOS.

VIII. Professional Schools

Professional and graduate training is available at Columbia University in many different areas. Barnard College keeps in close touch with the Schools and the Graduate Faculties, and advice concerning them may be obtained from class and major advisers.

The requirements for admission vary. In some instances a Bachelor's degree is essential; in others a student is eligible after two or three years of college study. Since only a limited number of students can be accommodated, the Office of University Admissions selects the most promising applicants. For information regarding current regulations, the student should consult the announcement of the particular school, which may be obtained from the Secretary of Columbia University. General information concerning admission requirements of specific professional schools and certain graduate programs follows.

SCHOOLS REQUIRING THE BACHELOR'S DEGREE

BUSINESS

The Graduate School of Business offers a four-term course of study leading to the degree of Master of Business Administration. The School operates on a nonmandatory trimester academic schedule, thereby making possible the completion of the program in 16 months. Advanced studies lead to the degree of Doctor of Philosophy.

The School has available, through its several programs of student aid, the means to assist all those who require marginal help to carry a full program of daytime classes. Applications for the degree programs are accepted from students who are able to take advantage of continuous study on a full-time basis and who have earned the baccalaureate or its equivalent.

A limited number of special students with unique and appropriate qualifications are admitted for study without degree credit after an interview with the Assistant Dean.

INTERNATIONAL AFFAIRS AND REGIONAL INSTITUTES

The purpose of the School of International Affairs is to provide a course of instruction which will equip a limited number of students for staff and administrative posts in international affairs. Emphasis is upon the acquisition of an adequate knowledge and understanding of the field generally, and a specialized knowledge of one area of the world. The degree of Master of International Affairs will be awarded upon the satisfactory completion of the two-year course.

The basic requirements for admission are a superior undergraduate record and a Bachelor's degree from an approved institution. Students in the School of International Affairs as well as in other graduate departments of the University may elect to take an area concentration in one of the several area institutes: East

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Asian Institute, Near and Middle East Institute, the Institute on East Central Europe, Russian Institute, European Institute, the Institute of African Studies, the Institute of Latin American Studies, and the Southern Asia Institute.

Further information may be obtained from the Office of University Admissions.

JOURNALISM

The Graduate School of Journalism offers a one-year course leading to the degree of Master of Science. A Bachelor's degree is required for admission to this school. Undergraduate work should, wherever possible, include courses in English composition, government of the United States, history since 1914, economics, and sociology.

LAW

The School of Law offers a three-year course of study leading to the degree of Bachelor of Laws. Although there is no required prelaw curriculum, students are advised to take courses in English, American political history, English political and constitutional history, economics, and in logic or philosophy or both.

Admission is on a competitive basis. All applicants are required to take an aptitude test. This test will be given in many locations throughout the United States several times during the academic year. For further information write to the Educational Testing Service, Princeton, New Jersey 08540.

LIBRARY SERVICE

The School of Library Service offers a year of graduate study leading to a Master of Science degree. Basic professional training is provided for work in college and university, school, public, and special libraries. Individuals with the requisite backgrounds and interests may be admitted to "special programs" in such fields as music, law, medicine, business and economics, science, art, and theology.

Candidates for admission should have a Bachelor's degree in liberal arts. An aptitude test and two years' study of a modern foreign language on the college level are among the requirements for admission.

Advanced study leading to the Doctor of Library Science degree is also offered.

PUBLIC HEALTH AND ADMINISTRATIVE MEDICINE

The Faculty of Medicine offers programs of professional study at the School of Public Health and Administrative Medicine leading to a Master of Science degree in Administrative Medicine, Biostatistics, Hospital Administration, Nutrition, and Parasitology. A Bachelor's degree from an approved college and evidence of satisfactory scientific training are necessary for admission. All

PROFESSIONAL SCHOOLS

candidates must spend at least one academic year at the school. An administrative residency of one calendar year's duration is required of all hospital administration students. A calendar year of administrative residency, or an equivalent experience, is required of all candidates for the degree in administrative medicine.

SCHOOL OF THE ARTS

The School of the Arts offers to graduates with a Bachelor's degree from Columbia University, or from another institution of acceptable standing, a course of study leading to the degree of Master of Fine Arts (in painting, and sculpture, a minimum of three semesters, and in theater, film, radio, television and writing, a minimum of two years).

A bulletin describing these graduate courses, and also undergraduate courses, is available at the Office of Admissions, School of the Arts, 440 West 110th Street, New York, N.Y. 10025.

SOCIAL WORK

The Columbia University School of Social Work offers a two-year course of study leading to the degree of Master of Science. An advanced curriculum leading to the degree of Doctor of Social Welfare is offered to graduates of schools of social work.

The School is an accredited member of the Council on Social Work Education. The curriculum includes a sequence of background and methods courses, supervised field work in social work agencies, and research to prepare students for professional practice in social work. A Bachelor's degree is required for admission. The undergraduate program of study must include a minimum of sixteen courses of liberal arts studies, with the emphasis in the direction of the social sciences.

Admission is on a selective basis. The announcement, giving information about the curriculum and dates for making application, may be obtained from the Director of Admissions, 2 East 91st Street, New York, N.Y. 10028.

TEACHERS COLLEGE

Teachers College, the University's Graduate School of Education, offers unique opportunities for advanced study in education and allied fields. For graduates of Barnard College, the Master of Arts in Teaching degree program, established in 1967, prepares secondary teachers of English, French, German and Spanish (Department of Languages and Literature); mathematics (Department of Mathematical Education); biology, chemistry, earth science, and physics (Department of Science Education); and of American history, world history, geography, area studies, and secondary school courses that draw upon anthropology, economics, political science, and sociology (Department of Social Studies). Details related to the Master of Arts in Teaching program are available on request at the Office of the Coordinator of Internships at Teachers College.

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In addition to preparing teachers at the elementary and secondary levels, Teachers College also offers qualified students the opportunity to pursue studies in college teaching, administration, guidance, international education, and psychology.

For guidance in seeking admission and additional information regarding programs of study, contact the Director of the Barnard Education Program or call the Coordinator of the Master of Arts in Teaching program, Mr. Edward R. Ducharme, Teachers College: telephone 870-4055, Room 319, Main Hall.

UNION THEOLOGICAL SEMINARY

Union Theological Seminary offers courses of study leading to the degrees of Bachelor of Divinity, Master of Religious Education, Master of Arts in the fields of Christian Education, Biblical Literature, and Comparative Religions, and Master of Sacred Music.

A Bachelor's degree is required for admission. Those applicants are selected who in the light of expressed purpose, personality, and record of scholarship give especial promise of usefulness in some form of Christian ministry.

The Seminary also participates in joint programs leading to the degrees of Master of Arts and Doctor of Philosophy in the field of religion at Columbia University.

Further information may be obtained from the Office of the Registrar, 3041 Broadway, New York, N.Y. 10027.

SCHOOLS NOT REQUIRING THE BACHELOR'S DEGREE

Admission may be gained to the following professional schools without a Bachelor's degree. In some instances, an exceptionally good student may receive the Bachelor of Arts degree from Barnard College after the completion of three years of undergraduate work and one year or more of work in the professional program. Students interested in such plans should make inquiries in the Office of the Dean of Studies early in their college careers.

ARCHITECTURE

The School of Architecture offers courses of study leading to the degree of Bachelor of Architecture. Under normal conditions, the degree may be obtained in four years.

The minimum course requirement for admission to the School is completion of 16 courses, including the following: English composition and literature, a foreign language (preferably French or German), mathematics through differential and integral calculus, physics, European history, and either economics, government, or sociology. The courses are described in detail in the

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Bulletin of the School of Architecture. A copy may be obtained from the Office of Architecture Admissions. Preference is given to applicants who hold an undergraduate degree.

DENTAL HYGIENE

A two-year course for dental hygienists is offered at the School of Dental and Oral Surgery, leading to the Bachelor of Science degree in Dental Hygiene. The minimum requirement for admission is two years of college work. The preparatory work at Barnard should include the satisfactory completion of courses in English, chemistry, sociology, and psychology.

This profession is controlled by state law and licensing examination. Graduates are qualified as dental hygiene teachers and public health dental hygienists.

Scholarship aid is available.

DENTAL AND ORAL SURGERY

The School of Dental and Oral Surgery offers a four-year course of study leading to the degree of Doctor of Dental Surgery. The preparatory work at Barnard should comprise a minimum of two courses each in English composition and literature, physics, biology, inorganic chemistry, and organic chemistry. The Admissions Committee of the School of Dental and Oral Surgery will consider carefully the entire predental record and select the most promising candidates. The minimum requirement for admission is three years of college work.

Scholarship aid for women is available.

ENGINEERING AND APPLIED SCIENCE

The School of Engineering and Applied Science offers undergraduate programs in the professional branches of engineering and in the applied sciences.

The first three years of the five-year program leading to the degrees of Bachelor of Arts and Bachelor of Science are spent under the jurisdiction of Barnard College, and a minimum of courses is taken in the engineering school. After successful completion of the first three years' work, the student applies for admission to the School of Engineering and Applied Science, where the remaining two years of more specialized engineering study are taken.

Although the above plan is educationally desirable, it is possible in some cases for the exceptional student to complete the prescribed subjects with two years in Barnard College and two years in the School of Engineering and Applied Science. This program leads only to the degree of Bachelor of Science.

Students interested in engineering or applied science should offer at entrance to Barnard mathematics through trigonometry, physics, and, if possible, chemistry, in addition to the general admission requirements. For details the Office of Admissions of the School of Engineering and Applied Science should be consulted.

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Further information about the engineering program and the advanced degrees may be obtained from the announcement of the School.

MEDICINE

The College of Physicians and Surgeons offers a four-year course of study leading to the degree of Doctor of Medicine. The preparatory work at Barnard must include the requirements as follows: at least one academic year of English, physics, biology, general chemistry, and organic chemistry.

Before admission to the medical school, the entire premedical record of each applicant is carefully examined in order that those who are adjudged the most promising candidates for the profession may be selected. While the minimum requirement for admission is three full academic years of college work, the complete college course of four years is considered the most desirable preparation.

NURSING

Columbia University offers a course in professional nursing leading to the degree of Bachelor of Science. The program is conducted on the Medical Center campus. The minimum requirement for admission is two years of college work. The program covers two academic years and two summer sessions. A special program is offered for students who hold a Bachelor's degree. This program is two academic years and one summer session in length. Preparatory work should comprise courses in chemistry, biology, psychology, and sociology. Acceptance of a candidate is based on grounds of character and health as well as fulfillment of the academic requirements.

OCCUPATIONAL THERAPY

The Faculty of Medicine offers a program of professional study in occupational therapy leading to a Bachelor of Science degree. Two years of acceptable college work are required for admission, with courses in biology, English composition, psychology, and in sociology. The course of study is of 25 months' duration including two academic years and nine months of clinical experience.

A graduate program of 17 months is offered for students already possessing a Bachelor of Arts or Science degree. The applicant must meet specific prerequisites in biology, psychology and sociology. On satisfactory completion of the program of one academic year and nine months of clinical experience, the Faculty of Medicine awards a certificate.

PHYSICAL THERAPY

The Faculty of Medicine offers a program of professional study in physical therapy which leads to the Bachelor of Science degree. The candidate for admission must present two years of acceptable college work, including

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courses in biological science, physics, English, and psychology. Requirements for admission to the licensure examination for physical therapists in the State of New York include two courses each in biology, chemistry, and physics. Students who plan to practice in New York State should accordingly fulfill the remainder of these requirements.

The course of professional study covers 21 calendar months, including two academic years of didactic instruction and clinical practice, and a two-month clerkship following the junior year of study.

A graduate program of one calendar year is offered for students already possessing a Bachelor of Arts or Bachelor of Science degree, depending on previous preparation in biological science, physics, English, and social science. The Faculty of Medicine awards a certificate upon satisfactory completion of this course.

IX. Fees

Barnard does not charge its students the full cost of their instruction, since its Trustees believe that admission to college should be based on intellectual ability and promise rather than financial resources. Student payments meet only two-thirds of the total educational expense; the balance must be obtained each year from investment income and from gifts of the Associate Alumnae and other friends of the College. By continuous efforts to increase annual gifts and endowment, and by economy of operation, the College keeps charges as low as possible without sacrificing the quality of its instruction.

SUMMARY OF FEES

I.	Full-time nonresident and commuter students	Each Term Academic Year	
	Tuition and fees ^{1,3}	\$1,050.00	\$2,100.00
II.	Full-time resident students		
	Tuition and fees ^{1,3}	\$1,050.00	\$2,100.00
	Residence fees ²	575.00	1,150.00
	Total	<u>\$1,625.00</u>	<u>\$3,250.00</u>

III. Other students

All students taking less than a full schedule (that is, less than three courses) are required to pay the registration (\$10), health service (\$15), and Undergraduate Association activity (\$10) fees each term, as well as \$265 per course for all academic work and \$5 for physical education, if this is required.

Students registering *in absentia* for one term or for one year are required to pay a registration fee of \$15.

IV. Deposits

All students: In order to obtain a place on the college roll for the ensuing academic year, students who are currently enrolled must pay a deposit of \$100 toward tuition and fee charges on or before *May 15*. Applicants for admission will be billed for the deposit at the time they signify their acceptance of admission to the College. One-half

¹ Includes registration, health service, and Undergraduate Association activity fees.
² Residents of Brooks, Hewitt, and Helen Reid Halls, \$575 each term, including room, board, and laundry.
Residents of 616 West 116th Street and 620 West 116th Street, \$330 each term, including room and laundry.
Residents of Plimpton Hall, \$350 each term, including room and laundry.
For nonresidents and commuters, board available on campus at \$275 per term.
³ Freshmen and transfers pay an orientation fee of \$10 for the Autumn Term in which they enter.

of this deposit (\$50) will be applied to the charges of the Autumn Term and the remainder to the charges of the Spring Term. The deposit toward the term's charges is forfeited unless the Bursar is notified of a change in plans no later than *August 1* for the Autumn Term or *December 1* for the Spring Term.

Resident students and nonresidents who pay housing fees through the College: a room deposit of \$50 is payable by *May 15* to secure the assignment of a room for the following academic year. One-half of this deposit (\$25) will be applied to the charges of the Autumn Term and the remainder to the charges of the Spring Term. The deposit toward the term's charges is forfeited unless the Bursar is notified of a change in plans no later than *August 1* for the Autumn Term or *December 1* for the Spring Term.

Deposits for the use of apparatus and material required in:

Chemistry 41, 42, 51, 58, 63, 87, 88, each course \$20.00

V. Payment of Charges and Fees

All charges and fees are payable semiannually, in advance. No reduction is made for late registration. Registration is not complete until all charges and fees are paid. Failure to complete registration (including the payment of all charges and fees) on time imposes automatically the statutory charge of \$15 for late registration.

Payment of charges and fees (accompanied by copy of the bill) must be made by *September 2* for the Autumn Term and by *January 15* for the Spring Term. If payments are mailed, envelopes must be postmarked not later than *September 2* or *January 15* respectively. Students admitted for the Autumn Term after *September 2* must pay their bills before the first day of registration. A late payment fee of \$15 will be charged on all payments made or postmarked after midnight on the above dates.

Rooms will not be held for students whose total bills are not paid by *September 2*.

All charges and fees are subject to change at any time at the discretion of the Trustees.

The privileges of the College, including examinations, are not available to any student who is delinquent in the payment of charges or fees. When bills are not paid by their due date or satisfactory arrangements for their payment are not made with the Bursar, the student will be required to withdraw from the College. Financial obligations include not only tuition, fees, and residence charges (if any) but fines due the libraries and other charges which may be incurred.

Checks or money orders in payment of all charges and fees must be in U.S. funds (at a U.S. bank) payable to Barnard College. Checks or money orders should be made out for the exact amount of the payment due.

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(The application fee of \$15, payable when application for admission is filed, is not credited on the bill and is never refunded.)

NOTE: Holders of a New York State Regents Scholarship and/or Scholar Incentive Award may deduct the amount shown on their Award Certificate provided the award certificate is enclosed with the bill.

VI. Deferred Payment

Many parents prefer to meet academic expenses out of monthly income, rather than in large cash payments. To these parents, we are making available the services of Education Funds, Inc., 10 Dorrance Street, Providence, R.I. 02901. It is a national organization specializing in education financing. The EFI program is low in cost and provides excellent benefit provisions including complete insurance protection. Information concerning the plan will be sent to all parents in the spring of 1969.

The College will also accept payment made through any bank or trust company or recognized financing agency provided payments are made on or before *September 2* for the Autumn Term or *January 15* for the Spring Term.

VII. Adjustment of Fees and Refunds

For changing program of study: If a student changes her program and the tuition called for is lower than the amount she has already paid, she will be refunded the excess only if the alteration in her program was made by *October 3* in the Autumn Term and by *February 13* in the Spring Term. If the new program calls for higher tuition, the student must pay the difference at the time she registers the program change.

For withdrawal: If a student withdraws from College after *August 1* for the Autumn Term and *December 1* for the Spring Term, the following amount of tuition and residence fees paid will always be retained:

Tuition and fees	\$50.00
Residence fees	25.00

Up to and including the first Friday of the term (see the Academic Calendar), the remaining tuition, \$1,000, which the student has paid will be refunded in full. After the first Friday of the term, twenty per cent of the remaining tuition, \$200, will be retained by the College for each additional week, or part of a week, of the semester up to the date on which the student's written notice of withdrawal from the College is received by the Office of the Dean of Studies.

Up to and including the first Friday of the term (see the Academic Calendar), the remaining residence fees that the student has paid will be refunded in full. After the first Friday of the term, ten per cent of the remaining residence fees will be retained by the College for each week, or part of a week, up to the date on which the student's written notice of withdrawal from the College is received by the Office of the Dean of Studies.

A resident student who moves from the residence halls while still a student in the College will forfeit all residence fee payments.

If a student has made only partial payment on her tuition or room and board, the amount of unpaid balance for each will be deducted from any withdrawal credit that is allowed. If the unpaid balance is larger than the credit allowed, the student must pay the difference.

Refunds: No refunds for board will be made for students who wish to take meals off-campus. Barnard is nondenominational and no provision can be made for special diets.

VIII. Additional Charges

Orientation fee: Required of all students entering Barnard College for the first time in September \$10.00

Tuition for technical courses in art history: See Announcement of the School of the Arts for special fees.

Deferred and special examinations, payable in each case before the examination is held:

For each deferred examination 5.00
For each special examination 10.00

(A special or deferred examination is one taken at any time other than the conclusion of a course.)

Late registration for academic work (see page) 15.00

Late filing of:

Tentative program cards 10.00
Application for deferred examinations 5.00
Application for language placement test 5.00

IX. Other Expenses

There are other miscellaneous expenses not payable to the College for which the student should plan. These include a gymnasium costume, approximately \$22; Residence Halls Student Association dues of \$3 for residents of College halls; and a minimum of \$75 per year for textbooks. Nonresident and commuter students should estimate a minimum of \$100 (\$3 weekly) for lunches, if they plan to buy them in the cafeteria or snack bar. Individual estimates of expense should also include minimum allowances for transportation for nonresident and commuter students, or two round-trip coach fares from home to college for resident students; clothes (\$150); incidentals (\$150-\$200).

X. Student Health Service

Campus medical service is available to all Barnard students and is covered by the Health Service fee included in the comprehensive charge payable each term. This service is not available during college vacations.

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Medical examinations are required of all freshmen and seniors. (Students are not permitted to register for the succeeding term until the required examination is complete.) The final date for completion of the examination by the College Physician is *December 15* for seniors; *May 15* for freshmen.

Students are entitled to the following services:

Barnard College Medical Office

Advice, treatment, and examination by the Barnard College physicians or nurses.

Columbia Health Service or St. Luke's Hospital, *upon referral by the Barnard College Physician.*

- a. One consultation without charge with any specialist.
- b. Surgical treatment of minor surgical condition.
- c. Laboratory or X-ray studies as indicated.
- d. Ten days a term free care in the Columbia University Infirmary.
- e. Four days of ward care at St. Luke's Hospital for severe acute surgical and medical conditions requiring hospitalization. In practically all situations when additional bed care is needed, it can be spent in convalescence in the Columbia University Infirmary.

The following services are not provided:

Dental care; eye examination, treatment and the fitting and provision of glasses; house calls or room visits; ambulance service; free care for chronic conditions or conditions predating original college matriculation.

XI. Insurance for Foreign Students

Foreign students who are not residing in the United States with members of their families are required to participate in the Accident and Sickness Insurance Plan. The Accident and Sickness Insurance Plan fee of approximately \$42 a calendar year is payable to the Insurance Company of North America. Full information concerning this policy will be mailed to the student with her college bill.

XII. Hospital Insurance

All students are eligible for membership in the Associated Hospital-United Medical Service for twelve consecutive months beginning October 1 at a cost of \$78.24. See the Bursar's Office for complete details.

XIII. Safekeeping of Students' Funds

Barnard College is not prepared to receive funds from students for safekeeping nor to cash personal checks or travelers checks.

F E E S

To cover their immediate expenses, students should provide themselves with travelers checks, which can be cashed at a local bank, or money orders, which the Columbia University Station of the U. S. Post Office will cash upon presentation of the Bursar's receipt. A Bursar's receipt is issued when a student registers at the beginning of each term.

It is also possible to open a checking, special checking, or savings account at one of the local banks:

Chemical Bank New York Trust Company
Broadway and 113th Street, New York, N.Y. 10025

First National City Bank of New York
Broadway and 111th Street, New York, N.Y. 10025

American Savings Bank
Broadway and 111th Street, New York, N.Y. 10025

X. Financial Aid

In so far as possible, the College helps qualified students who have financial need. Since the College fees do not cover the entire cost of her education today every student at Barnard in effect receives some financial aid from past donors. The balance is made up by endowment income and gifts. In addition to grants and loans, opportunities for part-time employment are provided to open Barnard's doors to girls of superior talent from all sections of the country. (See Office of Placement and Career Planning, page 44.) Students are urged to investigate federal and state aid programs and college tuition financing plans offered by local banks and insurance companies.

ANNUAL AWARDS

Loans or combination grant-and-loan awards are made by the Faculty Committee on Financial Aid to full-time students who have financial need, high scholarly ability, excellent character, and promise of future accomplishment. *The College shall be the sole judge of the financial aid to be granted, and may at any time withdraw or discontinue such aid.* The amount of the award depends on the student's financial need and is determined from the following:

1. The amount of the parents' contribution as estimated from information given on the College Scholarship Service forms.
2. The amount available from other sources, such as the New York State Regents Scholarships and New York State Scholar Incentive Awards.
3. The student's savings distributed over a five-year period.
4. The student's summer earnings (at least \$250 for freshmen and \$350 for sophomores, juniors, and seniors).
5. After the freshman year, the student's earnings from part-time work during the academic year (\$200).

The basic budget used to compute financial need includes, in addition to the college fees, allowances for other expenses as described on page 176.

Awards are for one year only. Students in good standing are eligible to apply for further assistance in subsequent years.

Applications for financial aid for entering students may be obtained from the Admissions Office and should be returned to that Office on or before January 1. The student applies in terms of financial need, not for any one of the specific scholarships listed in the following pages.

ENTERING STUDENTS: Entering students who are applying for aid must also file a financial statement with the College Scholarship Service, Box 176, Princeton, New Jersey 08540, or Box 881, Evanston, Illinois 60204, or Box 1025, Berkeley, California 94701, not later than January 1 of the senior year in high school. Forms may be obtained from the school or they will be sent by the College Scholarship Service on request. The Service acts as a

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central filing and distributing agent. Photographic copies of the completed statement will be sent to the colleges named by the applicant.

Each applicant must complete and file both forms as instructed above in order to be considered for financial aid. Applicants are notified of awards at the time they receive their notice of admission to the College.

If an entering student applies to more than one college in the Seven College Conference (Barnard, Bryn Mawr, Mount Holyoke, Radcliffe, Smith, Vassar, and Wellesley), her application is reviewed by the appropriate members of the Conference in order that awards may be made on a noncompetitive basis. Amounts vary only according to the difference in fees and, whenever possible, are equivalent in value.

STUDENTS IN COLLEGE: Students in college who are in need of financial aid and are academically qualified must file applications on special forms obtainable in the Financial Aid Office. Applications must be filed on or before February 6, 1970.

Applicants will be notified as soon as awards are made. Recipients are requested to inform the Office of Financial Aid immediately, in writing, of their plans with respect to the funds assigned to them.

NEW YORK STATE SCHOLAR INCENTIVE AWARDS

Any student who has been a legal resident of New York State for the preceding year is entitled to a Scholar Incentive Award (\$50 to \$250) for each term in which she is registered as a full-time degree candidate. The amount of this award is based upon the net taxable balance of her income and the income of those responsible for her support, as reported on the New York State Income Tax Return for the previous year. Application for awards must be made annually and should be filed before July 1 for each academic year, but will be accepted up to December 1. Applications for the Spring Term only have an April 1 deadline. Further information and application forms may be obtained from Regents Examination and Scholarship Center, 800 North Pearl Street, Albany, N. Y. 12204.

NEW YORK REGENTS COLLEGE SCHOLARSHIPS

The Regents of the University of the State of New York award, each year, scholarships to full-time degree candidates who are legal residents of New York State. These awards are based on the Regents Scholarship Examination and are open to students in any approved college or university in the state. Awards range between \$125 to \$500 a term, depending upon need. High school students can get further information from their counselors at school. New York Regents Scholarships are not automatically renewed; they must be reapplied for annually.

LOAN FUNDS

There are various loan funds at Barnard available for assignment to students as a part of their financial aid.

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Barnard College Loans

The Associate Alumnae of Barnard College maintain a Student Loan Fund from which loans to seniors are made. In 1950, through a gift of \$26,000 from Mr. and Mrs. Gerard Swope and Miss Henrietta Swope, an additional fund known as the Swope Loan Fund was established. In the spring of 1960, the Barnard College Loan Fund was established by the Board of Trustees to help meet the increased need of students. In 1961, the Pauline Hirschfeld Loan Fund was established with a bequest of \$5,000 from Pauline Steinberg Hirschfeld, '08. In 1966 two new loan funds were established: the Barnard College Club of Cleveland Loan Fund with gifts of \$1,176, to be used with preference for a student from the Northeastern Ohio area; and the Ann Susan Becker Memorial Loan Fund with gifts of \$1,325 from her family; and in 1968 the Adelaide Le Clercq Loan Fund was established with a gift of \$3,000 from Adelaide M. Hart, '06, to be used with preference for a student majoring in music or French.

These funds are administered by the Faculty Committee on Financial Aid. Loans are regularly assigned as part of a student's financial aid award. No interest is charged while the student is in college. Payments on principal may be made at any time before graduation. Principal of indebtedness is repaid in semiannual installments of \$150 each after the student ceases to be in full-time attendance at Barnard College. Interest is charged from the first day of the month after the student ceases to be in full-time attendance at Barnard College at the rate of three per cent per annum on the unpaid balance.

The Morris Morgenstern Student Loan Fund of \$5,000 was established in 1959. Interest-free loans not to exceed \$500 are granted upon application to the Financial Aid Office to any deserving undergraduates, other than freshmen, who are in need of temporary emergency assistance. Loans are granted for short terms, no longer than a year from the date of issue.

The Tudor Foundation Student Loan Fund of \$5,000 was established in 1967. Interest-free loans not to exceed \$1,000 in any one academic year are granted upon application to the Financial Aid Office, to mature when the student terminates her connection with the College.

National Defense Student Loan Program

Barnard participates in the National Defense Student Loan Program (Title II of the National Defense Education Act of 1958). A portion of the funds for this Program are granted to the College by the federal government after application by the College; the balance of the funds are contributed by Barnard. These loans are assigned by the College to students as a part of their financial aid. Special consideration is given to those students who intend to teach in college or in public or private elementary or secondary schools.

State Loans

Legal residents of the State of New York who are degree candidates are eligible to apply for loans guaranteed by the New York Higher Education Assistance Corporation. No interest is charged as long as the student is registered as a

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full-time student, but interest and repayment of principal must begin when a student ceases to be so registered. Further information and application forms for these loans should be obtained from local banks.

Other states also have loan plans through the Federal Guaranteed Loan Program. Students should inquire at their local banks regarding such loan plans.

BARNARD COLLEGE SCHOLARSHIP FUNDS

A list of scholarship funds established by gifts, endowment, or in trust follows. The income from such funds, both unrestricted and restricted, and from the funds for grants-in-aid is available each year.

UNRESTRICTED¹

NIELS J. ALLISON FUND (1964). From the estate of Beatrice C. Allison '12. \$55,229.

ALUMNAE SCHOLARSHIP FUND (1922). A tenth reunion gift by the Class of 1912, subsequently supplemented by legacy from the estate of Julia Ludlow Young and by gifts of other alumnae. Approximately \$15,742.

ANNA E. BARNARD SCHOLARSHIP FUND (1899). In honor of Mrs. John G. Barnard by Emily H. Bourne. \$3,000.

FRANCES E. BELCHER SCHOLARSHIP FUND (1963). By bequest of Miss Frances E. Belcher. \$42,257.

RUTH MARSHALL BILLIKOPF SCHOLARSHIP FUND (1950). In honor of Ruth Marshall Billikopf '19. \$5,000.

VARIAN WHITE BLUMBERG SCHOLARSHIP FUND (1952). From the estate of Varian White Blumberg '13. \$5,000.

CHARLES E. BOGERT MEMORIAL SCHOLARSHIP AND ANNA SHIPPEN YOUNG BOGERT MEMORIAL SCHOLARSHIP FUND (1913). By bequest of Annie P. Burgess. \$10,000.

EVA-LENA MILLER BOOTH SCHOLARSHIP FUND (1932). In memory of Mrs. Eva-Lena Miller Booth, by the New York City Chapter of the Daughters of the American Revolution. \$1,000.

BREARLEY SCHOOL SCHOLARSHIP FUND (1889). By pupils and former pupils of the Brearley School. \$3,000.

MARTHA ORNSTEIN BRENNER SCHOLARSHIP FUND (1915). In memory of Martha Ornstein Brenner '99, by her friends. \$4,000.

ARTHUR BROOKS FUND (1897). By Olivia E. Phelps Stokes as a memorial to the Reverend Arthur Brooks, D.D., Rector of the Church of the Incarnation and Chairman of the Board of Trustees of Barnard College during the first six years of its existence. \$5,000.

THOMAS F. CLARK STUDENTS' FUND (1928). By bequest of Mrs. Fanny Foster Clark. \$100,000.

¹ Figures compiled as of January 1, 1969.

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JENNIE B. CLARKSON SCHOLARSHIP FUND (1898). By Mrs. W. R. Clarkson. \$3,000.

CLASS OF 1921 SCHOLARSHIP FUND (1931). A tenth reunion gift by the Class of 1921. \$2,500.

CLASS OF 1954 SCHOLARSHIP FUND (1955). Gifts of the Class of 1954 through their fifth reunion in 1959. \$4,584.

COLLEGE BOWL SCHOLARSHIP FUND (1968). Established with gifts from the General Electric Company, *Seventeen* Magazine, and Gimbels Department Store, earned by the Barnard College Bowl Team's five successive victories. \$19,500.

VERA B. DAVID SCHOLARSHIPS (1962). Income from the trust established by bequest of Vera B. David in memory of her late husband, John David.

ADA M. DONELLE SCHOLARSHIP FUND (1948). By bequest of Mrs. Ada M. Donelle. \$121,751.

MARGARET JANE FISCHER SCHOLARSHIP FUND (1968). With a gift from Margaret Jane Fischer '35. Awarded annually. \$5,115.

FISKE SCHOLARSHIP FUND (1895). By Mrs. Martha T. Fiske-Collord. \$5,000.

GALWAY FUND (1912). By an anonymous donor. \$2,400.

ANITA HYMAN GLICK SCHOLARSHIP FUND (1968). In memory of Anita Hyman Glick '62 by her family and friends. Awarded annually to students who are academically qualified and in need of financial aid. \$10,240.

IRMA ALEXANDER GOLDFRANK FUND (1919). In memory of Irma Alexander Goldfrank '08, by her friends. \$2,106.

GRAHAM SCHOOL SCHOLARSHIP FUND (1907). By the Graham Alumnae Association. \$7,300.

LOUISE H. GREGORY SCHOLARSHIP FUND (1955). From gifts in memory of Louise H. Gregory. \$4,497.

HARKNESS SCHOLARSHIP FUND (1939). With a gift from Edward S. Harkness. \$100,000.

RITA HILBORN HOPF MEMORIAL SCHOLARSHIP FUND (1966). By bequest of Rita Hilborn Hopf '14. \$242,012.

CHARLES EVANS HUGHES SCHOLARSHIP FUND (1952). By bequest of Charles Evans Hughes. \$14,300.

LILY MURRAY JONES SCHOLARSHIP FUND (1950). In memory of Lily Murray Jones '05, Alumnae Trustee from 1939 to 1943, by Murray, Alfred, and Wallace Jones. \$25,146.

MARJORIE LAWRENCE KAUFMAN SCHOLARSHIP FUND (1965). By the Trustees out of funds left to the College by the life income contract of Marjorie Lawrence Kaufman '19. \$24,290.

AUGUSTA LARNED SCHOLARSHIP FUND (1924). By bequest of Augusta Larned. \$10,000.

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MARJORIE HERRMANN LAWRENCE SCHOLARSHIP FUND (1967). In memory of Marjorie Herrmann Lawrence '19. \$16,000.

HARRIETT MOONEY LEVY SCHOLARSHIP FUND (1965). By bequest of Harriett Mooney Levy. \$69,339.

JOAN SPERLING LEWINSON SCHOLARSHIP FUND (1955). With a gift from Joan Sperling Lewinson '13. \$30,000.

JUDITH LEWITTES SCHOLARSHIP FUND (1957). In memory of Judith Lewittes '55, by her family and friends. \$5,599.

ANNE ELIZABETH LINCOLN SCHOLARSHIP FUND (1963). From the estate of Anne Elizabeth Lincoln '24. \$8,441.

AMY LOVEMAN SCHOLARSHIP. See Undergraduate Awards, page —.

LOUISE GRACE LUBY AND JAMES LUBY SCHOLARSHIP FUND (1947). From the estate of Grace Farrant Luby '93. \$5,000.

CECILE LEHMAN MAYER SCHOLARSHIP FUND (1962). With a gift from Mr. and Mrs. Paul Mazur, the income to be awarded annually for financial aid to the maximum of four or fewer students. \$25,000.

MEMORIAL SCHOLARSHIP FUND (1954). To receive contributions in memory of deceased alumnae and friends. \$36,464.

WILLIAM MOIR SCHOLARSHIP FUND (1912). In memory of William Moir by his wife. \$10,000.

CAROLINE CHURCH MURRAY FUND (1918). In memory of his wife, Caroline Church Murray, by George Welwood Murray. \$5,000.

ANNETTE FLORANCE NATHAN SCHOLARSHIP FUND (1947). From the estate of Frederick Nathan. \$3,000.

LUCRETIA PERRY OSBORN SCHOLARSHIP FUND (1940). In memory of Lucretia Perry Osborn, a Trustee of Barnard College from 1893 to 1930, by her family and friends. \$5,000.

M. GLADYS QUINBY SCHOLARSHIP FUND (1961). By bequest of M. Gladys Quinby '08 and gifts of friends. \$4,887.

EVA RICH SCHOLARSHIP FUND (1968). By bequest of Eva Jacobs Rich '07. \$39,196.

PETER C. RITCHIE, JR. SCHOLARSHIP FUND (1937). By bequest of Virginia J. Ritchie. \$4,436.

EDITH LOWENSTEIN ROSSBACH MEMORIAL SCHOLARSHIP FUND (1950). In memory of Edith Lowenstein Rossbach '19, by her family, friends, and classmates. \$23,304.

EDNA HELLER SACHS SCHOLARSHIP FUND (1955). With a gift from Edna Heller Sachs '10. \$15,250.

ELEANORA BUTLER SANDERS SCHOLARSHIP FUND (1922). By bequest of Henry M. Sanders. \$10,000.

ANNA M. SANDHAM SCHOLARSHIP FUND (1922). By bequest of Anna M. Sandham to Columbia University. \$10,000.

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SCHMITT-KANEFENT SCHOLARSHIP FUND (1931). By bequest of Catherine Schmitt. \$7,102.

SCHOLARSHIP FUND (1901). By general subscription through the Scholarship Committee of the Board of Trustees. Approximately \$11,980.

KATHERINE FLINT SHADEK SCHOLARSHIP FUND (1961). By Katherine Flint Shadek '44. \$16,202.

EMILY JAMES SMITH SCHOLARSHIP FUND (1899). In honor of Miss Smith, Dean of Barnard College from 1894 to 1900, by Emily H. Bourne. \$3,000.

GEORGE W. SMITH SCHOLARSHIP FUND (1906). In memory of George W. Smith, a Trustee of Barnard College, by Mrs. Martha T. Fiske-Collord. \$5,000.

EDNA PHILLIPS STERN SCHOLARSHIP FUND (1952). In memory of Edna Phillips Stern '09, by her family and friends. \$20,797.

ISABEL GREENBAUM STONE SCHOLARSHIP FUND (1957). In memory of Isabel Greenbaum Stone '18, by her family. Recipients of these scholarships are urged to repay the amounts they receive as soon as they are in a position to do so. \$15,365.

OLON E. SUMMERFIELD FOUNDATION SCHOLARSHIP FUND (1960). Gifts from the Solon E. Summerfield Foundation. \$11,500.

VELTIN SCHOOL SCHOLARSHIP FUND (1905). By the alumnae of Mlle. Veltin's School. \$3,000.

ALMA F. WALLACH SCHOLARSHIP FUND (1951). In memory of Alma F. Wallach from the estate of Richard L. Leo. \$1,000.

ELLA WEED SCHOLARSHIP FUND (1895). In memory of Ella Weed, Chairman of the Academic Committee of the Board of Trustees of Barnard College during the first five years of its existence, by pupils and alumnae of Miss Anne Brown's School. Approximately \$8,602.

HYMEN AND HELEN WERNER SCHOLARSHIP FUND (1964). In memory of Hymen and Helen Werner. Established by Helen Frankfield Werner '06 in 1953 in memory of her husband. Following her death maintained as the Hymen and Helen Werner Scholarship Fund by her daughters, Therese Werner Kohnstamm '33, Laura Werner Wallerstein '36 and Jean Werner Kane '37. \$6,068.

SCHOLARSHIP FUNDS RESTRICTED¹

MARY GERTRUDE EDSON ALDRICH FUND (1916). By Mrs. James Herman Aldrich to assist, in her senior year, a student who has shown in her college life the moral qualities which go to the making of fine womanhood. \$1,000.

BERTHA R. BADANES SCHOLARSHIP FUND (1966). By Bertha R. Badanes '14. For children of New York City school teachers preferably from Brooklyn. If there is no qualified candidate the award may be used for another needy student, preferably from Brooklyn. \$5,000.

¹ Figures compiled as of January 1, 1969.

FINANCIAL AID

BARNARD COLLEGE CLUB OF NEW YORK SCHOLARSHIP FUND (1952). For a Barnard student whose home is outside the area of the City of New York. Approximately \$33,079.

BARNARD-IN-WESTCHESTER ENDOWMENT FUND (1962). By the Barnard College Club of Westchester County. For scholarships, preferably for students from Westchester County. \$12,154.

BARNARD SCHOOL ALUMNAE SCHOLARSHIP FUND (1916). By the alumnae of the Barnard School for Girls. Awarded to a student in any class, preference being given to nominees of the school. \$4,000.

WILLINA BARRICK MEMORIAL SCHOLARSHIP FUND (1936). In memory of Willina Barrick '00, by the College Club of Jersey City. Awarded on the nomination of the Club to a graduate of a Jersey City secondary school. \$10,635.

IRVING BERLIN SCHOLARSHIP FUND (1950). By Irving Berlin. Awarded annually to one or more girls of foreign-born parentage. \$23,500.

IDA BLAIR MEMORIAL FUND (1937). In memory of Ida Blair by the Women's Democratic Union. To be used for the purchase of books for a student, preferably one studying political science. \$700.

ALICE MARIE-LOUISE BRETT SCHOLARSHIP FUND (1930). In memory of his daughter, Alice Marie-Louise Brett '15, by bequest of Philip E. Brett. Awarded during her senior year to a student specializing in French. \$10,000.

WILLIAM TENNEY BREWSTER AND ANNA RICHARDS BREWSTER FUND (1961). By bequest of William Tenney Brewster. To be awarded preferably in amounts not less than \$1,000, with priority to daughters of professional people educated in independent schools. \$166,614.

BROOKLYN SCHOLARSHIPS (1895). By the Trustees of Columbia University in recognition of the gift to Columbia University by President Seth Low of a memorial building for the University Library. Open to students residing in Brooklyn and prepared in a Brooklyn school. Twelve at \$150 each.

ANNE BROWN ENDOWMENT SCHOLARSHIP FUND (1939). In memory of Anne Brown, by the Anne Brown Alumnae Association, for young women of the City of New York. Approximately \$31,339.

CARPENTIER RESIDENCE SCHOLARSHIP FUND (1919). By bequest of Horace W. Carpentier. Awarded annually to students who are not residents of New York City or its vicinity. \$200,000.

ELIZA TAYLOR CHISHOLM MEMORIAL SCHOLARSHIP FUND (1901). By the Alumnae Association of Miss Chisholm's School, which Association reserves the privilege of precedence for such candidates as it may recommend. \$3,000.

MRS. HENRY CLARKE COE SCHOLARSHIP FUND (1910). By the National Society of New England Women, now the New York City Colony of the National Society. Awarded, on nomination of the Chairman of the Scholarship Committee of the New York City Colony, to a student from New England

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or of New England parentage. After the award is made the Society requires from the beneficiary full obedience to discipline and the highest ideals of scholarship. This may be awarded to an entering freshman. \$3,600.

CLASS OF 1919 DECENNIAL FUND (1929). A tenth reunion gift by the Class of 1919, for a resident student. \$5,000.

AUGUSTA SALIK DUBLIN SCHOLARSHIP FUND (1960). In memory of Augusta Salik Dublin '06, by her family and friends. Awarded at the discretion of the Committee on Financial Aid to a Barnard student, to enable her to continue her education in preparation for leadership in a field of social welfare, such as social work, social legislation, housing and city planning, or a related area. Available either to a student for undergraduate study or to a graduating student for graduate work, for one or more years. \$13,182.

EDUCATIONAL AND CULTURAL TRUST FUND OF THE ELECTRICAL INDUSTRY SCHOLARSHIPS (1951). By the major electrical contracting firms of New York City for sons and daughters of members of Local Union No. 3 of the International Brotherhood of Electrical Workers. Variable in number.

ENGLISH SCHOLARSHIP FUND (1920). By an anonymous donor. Awarded to a student of good standing who is specializing in English and is in need of help; with the proviso that, if in any year there is no student specializing in English who is particularly deserving of aid, the scholarship may be used to assist a student majoring in some other subject. \$5,000.

GLADYS RENSHAW ESTERBROOK SCHOLARSHIP FUND (1958). In memory of her daughter, Gladys Renshaw Esterbrook '20, by bequest of Minnie R. Esterbrook. Preference is given to applicants majoring in English or French. \$5,000.

MARTHA T. FISKE SCHOLARSHIP FUND (1911). In memory of her sister, Mrs. Martha T. Fiske-Collord, by Anna E. Smith. Awarded to an applicant not a resident of New York City or its suburbs. \$5,000.

FOOD FAIR SCHOLARSHIP (1954). By the Food Fair Stores Foundation for employees and sons and daughters of employees of Food Fair Stores.

HELEN JENKINS GEER SCHOLARSHIP FUND (1940). In memory of her mother, Helen Jenkins Geer '15, by Helen Hartley Geer '40. Awarded annually, after conference with the donor. \$5,000.

VIRGINIA GILDERSLEEVE INTERNATIONAL SCHOLARSHIP FUND (1937). In honor of the international work of Dean Emeritus Gildersleeve, by Charles R. Crane. Awarded annually to a foreign student coming to Barnard to study. \$15,100.

VIRGINIA C. GILDERSLEEVE SCHOLARSHIP FUND (1968). In memory of Dean Emeritus Gildersleeve by the Class of 1923 on their forty-fifth reunion. Awarded to a student majoring in the humanities, with priority given to an English major. \$5,115.

EMMA HERTOZ SCHOLARSHIP FUND (1904). With gifts from residents of Yonkers, New York. Awarded, in conference with the faculty of the Yonkers High School, to a graduate of that school. \$3,000.

FINANCIAL AID

MARION ALICE HOEY FUND (1944). In memory of Marion Alice Hoey '14, by Nellie Poorman. Preference is given to applicants studying Greek and Latin. \$2,000.

LILLIA BABBITT HYDE SCHOLARSHIP FUND (1953). By the Lillia Babbitt Hyde Foundation. Awarded to premedical students. \$25,000.

CHARLOTTE LOUISE JACKSON SCHOLARSHIP FUND (1928). In memory of Charlotte Louise Jackson, by bequest of her sister, Fannie A. Jackson. Awarded to a graduate of a Yonkers High School selected by or under the direction of the Board of Education of Yonkers. \$5,000.

MARY E. LARKIN JOLINE SCHOLARSHIP FUND (1927). By bequest of Mary E. Larkin Joline. Awarded to a student who is specializing in music. \$10,000.

WERNER JOSTEN SCHOLARSHIP FUND (1955). With a gift from Mrs. Werner Josten. Preference is given to a student majoring in music, but if in any year no such student is eligible, the scholarship may be awarded to a student majoring in some other field. \$25,916.

JESSIE KAUFMANN SCHOLARSHIP FUND (1902). In memory of his daughter, Jessie Kaufmann, by Julius Kaufmann. Awarded on the merits of entrance examinations to a student who, after careful investigation, is found to have no relative able to assist her financially. It may be held for the entire college course. \$4,000.

KIMBALL FELLOWSHIP FUND (1938). By bequest of Lillian Emma Kimball. Awarded to a woman from Spain or one of the Spanish-American countries who shall pursue a year of graduate or undergraduate study at Barnard or elsewhere, under the direction of the Barnard Department of Spanish. \$32,883.

ELEANOR KINNICUTT SCHOLARSHIP FUND (1911). In memory of Mrs. Francis P. Kinnicutt, a Trustee of Barnard College. Awarded at the end of the freshman year to a student of exceptionally high standing. It may be held for three years, provided the recipient continues to maintain a high rank. \$5,000.

CAROLINA MARCIAL-DORADO SCHOLARSHIP FUND (1953). In memory of Professor Carolina Marcial-Dorado, for many years head of the Barnard College Department of Spanish. Awarded to a student from Spain, or to a Spanish major continuing graduate studies in the United States or abroad. If at any time there is no applicant eligible for the grant, it may at the discretion of the department be awarded to a student who is majoring in Spanish. \$15,378.

EUGENE F. AND MINNIE GOUGER MCGOWAN SCHOLARSHIP FUND (1955). By an anonymous donor. Preference is given to candidates from Mecklenburg County, North Carolina. If in any year no such candidate is eligible, the scholarship may be awarded to a student or students from other areas. \$10,000.

FANNIE MOULTON MCLANE SCHOLARSHIP FUND (1961). By bequest of Fannie Moulton McLane '07. Awarded for tuition to deserving students who are citizens of the United States of America, with preference given to those, if any, who satisfactorily establish that they are of Colonial or Revolutionary ancestry, or the descendants of a Civil War soldier. \$7,500.

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MRS. DONALD MCLEAN SCHOLARSHIP FUND (1906). By the New York City Chapter of the Daughters of the American Revolution. Awarded, in conference with a representative of the Chapter, to a student who agrees to pursue the study of history (chiefly that of the United States) continuously throughout her college course. \$3,000.

FERRY STARR MORGAN SCHOLARSHIP FUND (1959). In memory of her father, by bequest of Grace B. Morgan '19. Awarded to a student who is majoring in music or philosophy. \$10,000.

LAWRENCE MORRIS SCHOLARSHIP FUND (1968). In memory of Lawrence Morris by his sister Mrs. Walter Sturges (Alice Morris '36) and other members of the family. Awarded annually with preference given to a nominee of the New York City Mission Society. \$5,925.

MARY BARSTOW POPE SCHOLARSHIP FUND (1913). In memory of Mary Barstow Pope, teacher in Miss Chapin's School, by her friends, her fellow teachers, and her pupils. Open to any undergraduate for the whole or part of her course, and awarded on the nomination of a self-perpetuating committee representing the founders. \$4,000.

PUBLIC SERVICE SCHOLARSHIP FUND (1934). By the Women's Organization for National Prohibition Reform. Awarded to young women of exceptional ability, interested in following a career of public service in the field of political science, who show special promise of future usefulness in the public service. Awarded at the discretion of the Faculty of Barnard College to one or two students in their junior or senior years. In the case of a particularly promising student the Faculty may, at its discretion, extend the award to cover one, two, or three additional years of graduate study at an approved college or university in order to encourage young women of exceptional ability to complete a course of study which will fit them for service in public life. \$30,000.

LUCILLE PULITZER SCHOLARSHIP FUND (1899). In memory of his daughter, Lucille Pulitzer, by Joseph Pulitzer. Three are restricted to students from the City of New York; eight are for resident students. \$176,459.

AMELIA AGOSTINI DE DEL RIO SCHOLARSHIP FUND (1955). In honor of Amelia de del Río, Chairman of the Department of Spanish from 1942 to 1962. Awarded to a student from Mrs. de del Río's native island of Puerto Rico. If at any time there is no applicant from Puerto Rico eligible for the grant, it may, at the discretion of the department, be awarded to a student who is majoring in Spanish. \$21,333.

DR. HARRY ROSENSTEIN SCHOLARSHIP FUND (1967). In memory of Dr. Harry Rosenstein by his wife, Bertha Z. Rosenstein, and daughter, Gertrude L. Rosenstein '48. Awarded to a premedical student. \$5,000.

JOAN ROSOF SCHOLARSHIP FUND (1964). By Mr. Murray Rosof in honor of his daughter, Joan Rosof '61. Awarded to qualified students with the wish, but not the directive, that preference be given to his descendants or, in the absence thereof, to students from the State of New York. \$5,340.

FELIX ST. GEORGE SCHOLARSHIP (1955). In memory of her father, Felix St. George, by bequest of Ida St. George. Awarded to an incoming freshman whose subject of interest is a science or premedical course, more particularly physics, chemistry, or biology. \$7,455.

FINANCIAL AID

DOROTHY K. SCHEIDELL SCHOLARSHIP FUND (1965). In memory of Dr. Dorothy K. Scheidell '28, by her family, classmates, and friends. Awarded to a premedical student. If in any year no student qualifies for the award, it may be deferred until the following year. If no student qualifies over a three-year period, the accumulated income may be awarded to any able student with financial need. \$5,395.

LILLIAN SCHOEDLER SCHOLARSHIP FUND (1967). By bequest of Lillian Schoedler '11. Income and/or principal awarded to deserving students with financial need who have shown promise of qualities of leadership and/or potentialities for future civic or social usefulness. Awards preferably distributed in small amounts to many students. \$65,860.

FRED CURTIS SMITH MEMORIAL SCHOLARSHIP FUND (1955). In memory of Fred Curtis Smith, at the time of his death Vice President and Mortgage Officer of the Bowery Savings Bank. \$57,000.

HILDA STABER SCHOLARSHIP FUND (1967). By bequest of Hilda Staber '05. Awarded to foreign students of character and ability. \$25,000.

EMMA A. TILLOTSON SCHOLARSHIP FUND (1910). By Mrs. Luther G. Tillotson. Awarded at the end of the freshman year to a student of exceptionally high standing. It may be held for three years, provided the recipient continues to maintain a high rank. \$5,000.

CLARA BUTTENWIESER UNGER MEMORIAL FUND (1938). In memory of his daughter, Clara Buttenwieser Unger '13, by Joseph L. Buttenwieser. Awarded annually to assist through her senior year a student whose subject of major interest is government, and who shows promise of ability to contribute to the promotion and perpetuation of true democracy under our Constitution. \$2,500.

HELEN ELIZABETH VOSBURGH SCHOLARSHIP FUND (1934). In memory of Helen Elizabeth Vosburgh '25, by bequest of Katherine G. Lippke. Preference is given to a self-supporting student. \$5,000.

GERTIE EMILY GORMAN WEBB SCHOLARSHIP FUND (1953). By Charles Webb. Awarded to a student nominated by the Department of History. \$4,990.

ALMA GLUCK ZIMBALIST SCHOLARSHIP FUND (1940). By bequest of Alma Gluck Zimbalist. Awarded annually to a student who wishes to major in political science. \$10,000.

SCHOLARSHIPS—ESTABLISHED ON A TEMPORARY BASIS

BARNARD-IN-BROOKLYN CLUB SCHOLARSHIP (1944). A tuition scholarship, with variable stipend. Awarded annually, with preference given to a student from Brooklyn.

THE BARNARD COLLEGE CLUB OF DETROIT SCHOLARSHIP (1958). A tuition scholarship with variable stipend. Awarded annually, with preference given to a new student from Metropolitan Detroit.

FAIRFIELD COUNTY SCHOLARSHIP (1962). Awarded preferably to entering freshmen from Fairfield County for one year only.

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ARLENE HERSHEY MEMORIAL SCHOLARSHIP (1964). A scholarship with variable stipend awarded annually to a senior in the Education Program.

HOLLAND DAMES SCHOLARSHIP (1915). In honor of Fanny I. Helmuth, by the Daughters of Holland Dames. Awarded in conference with a representative of the Society to a student descended from the early Dutch settlers.

HELEN ROSE SCHEUER SCHOLARSHIP (1966). A \$2,000 scholarship awarded annually for five years. Given in honor of Helen Rose Scheuer '16, by her husband, Mr. S. H. Scheuer.

THRIFT SHOP SCHOLARSHIPS (1938). Awarded annually from the proceeds of the Barnard Scholarship Unit of Everybody's Thrift Shop, 330 East 59th Street, New York, N.Y. 10022.

XI. Honors

The following funds were established to honor those who have shown exceptional distinction in their chosen field of study. The income from these funds is awarded each year, unless otherwise stated.

GRADUATE FELLOWSHIPS

DOROTHY ALLEN FELLOWSHIP (1948). Given on recommendation of the Department of Mathematics to a qualified senior graduating in February or June whose major field is mathematics or physics. The recipient will be selected on the basis of scholarship and character. Indications of a promising career and the student's plans for her future will be among the factors given consideration in making the selection. A needy student shall receive the entire sum toward tuition and other expenses of graduate work in mathematics or physics at an institution selected by the student. A student not in need shall receive \$100. In case no candidate is considered sufficiently well qualified, the award will be deferred until the following year. An award of \$800.

ASSOCIATE ALUMNAE OF BARNARD COLLEGE GRADUATE FELLOWSHIP (1963). To be awarded annually to a graduate who shows exceptional promise in her chosen field of work. \$40,000. Applications must be filed in the Alumnae Office by February 1.

GEORGE WELWOOD MURRAY GRADUATE FELLOWSHIP FUND (1930). By George Welwood Murray. Awarded as an academic honor to that member of the graduating class of Barnard College who, in the opinion of the Faculty, shows most promise of distinction in her chosen line of work in the field of the humanities and/or the social sciences. Should the recipient prove in no need of financial assistance, she may retain the title and honor but resign the income, which may then be used by the College for other fellowships or scholarships. Students who have graduated in February are eligible as well as those who are to graduate in June. The holder is to pursue a year of graduate study at Columbia or any other university or college of approved standing. \$20,000.

GRACE POTTER RICE FELLOWSHIP FUND (1935). In memory of his wife, Grace Potter Rice, Instructor and Assistant Professor of Chemistry at Barnard from 1918 to 1934, by Winthrop Merton Rice. Awarded as an academic honor to the member of the graduating class of Barnard College who, in the opinion of the Faculty, shows most promise of distinction in her chosen line of work. Should the recipient prove in no need of financial assistance, she may retain the title and honor but resign the income, which will then be used for other fellowships or scholarships. Students who have graduated in February are eligible, as well as those who are to graduate in June. The holder is to pursue a year of graduate study in the natural sciences or mathematics at Columbia or any other university or college of approved standing. \$24,000.

THE HERBERT MAULE RICHARDS FUND (1933). In memory of Professor Richards, a member of the Department of Botany from 1896 to 1928 and Chairman from 1897 to 1928, by the Barnard Botanical Club, former students, and friends. Granted from time to time to further botanical research, under the direction of an approved institution, to a student or an alumna of Barnard College. \$5,000.

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ALPHA ZETA CLUB GRADUATE SCHOLARSHIP FUND (1936). By the Alpha Zeta Club, Inc. Awarded at the discretion of the Faculty as an academic honor to a member of the graduating class of Barnard College who, in their opinion, shows promise of distinction in her chosen line of work. It may also be awarded to an outstanding recent Barnard graduate who is a candidate for a higher degree. \$18,038.

WILLIAM MASON SCHOLARSHIP (1928). The William Mason Scholarship in music is awarded periodically on recommendation of the Department of Music to a member of the graduating class of Barnard or Columbia College for graduate studies in music. An award of \$500.

MARGARET MEYER GRADUATE SCHOLARSHIP FUND (1952). In memory of Margaret Meyer Cohen '15, by bequest of Annie Nathan Meyer. Awarded to a student in the graduating class for instruction in secretarial work. \$3,000.

GRADUATE PRIZES

FRANK GILBERT BRYSON PRIZE (1931). In memory of Frank Gilbert Bryson, by bequest of Ella Fitzgerald Bryson '94. The President of the College shall fix the method of selecting a senior who, in the opinion of the class, has given conspicuous evidence of unselfishness and who has made the greatest contribution to Barnard during her college career. Income on \$3,000.

ANNE DAVIDSON PRIZE (1965). In honor of Anne Davidson by the R. W. Davidson family and friends. Awarded at the discretion of the Geology and Geography Department to a graduating senior who has demonstrated continuing interest in the study of Conservation, Natural Resources, or an allied field. The holder is to pursue a year's graduate study in one of these fields at Columbia or any other university of approved standing. Income on \$8,000.

DEAN PRIZE IN GERMAN (1925). By Edward D. Adams for the promotion of the study of German language and literature in Barnard College. Awarded to that member of the senior class who has throughout her course done the best work in German language and literature. Income on \$1,000.

CLARA L. FROELICH MATHEMATICS PRIZE (1962). By Clara L. Froelich '15. Awarded annually by the Department of Mathematics to a member of the graduating class whose work in mathematics has revealed superior ability in grasping the concepts of the subject and has been distinguished by thoughtful devotion to fundamental ideas rather than to the mere mastering of techniques. \$200.

KOHN MATHEMATICAL PRIZE (1892). By Mrs. S. H. Kohn. Awarded to a senior for excellence in mathematics. Competitors for this prize must have pursued mathematics continuously during their college course. Income on \$1,000.

UNDERGRADUATE AWARDS¹

The income from prize funds is awarded each year.

ESTELLE M. ALLISON PRIZE FUND (1937). By bequest of Estelle M. Allison. Awarded to a student for excellence in literature. \$1,001.

¹ Figures compiled as of January 1, 1969.

HONORS

MARY E. ALLISON PRIZE FUND (1937). In memory of her mother, Mary E. Allison, by bequest of Estelle M. Allison. Awarded to a student for general excellence in scholarship. \$1,001.

THE AMERICAN STATISTICAL ASSOCIATION PRIZE, NEW YORK AREA CHAPTER (1960). Awarded annually to the outstanding undergraduate student in statistics. A one-year student membership in the American Statistical Association and \$50.

EDNA HENRY BENNETT MEMORIAL FUND (1927). In memory of Edna Bennett '15, Lecturer in Zoology, by her friends. The income is to be awarded by the Department of Biology for work at a biological laboratory offering summer courses. \$1,640.

BORDEN FRESHMAN PRIZE (1962). A prize of \$200 awarded to the freshman who carries a full academic program throughout the year and receives the highest average in her class. In the event of a tie it will be awarded to the student whose program was the heaviest. During the autumn immediately following, the winner will be announced and the prize awarded, regardless of whether or not she returns to Barnard. \$1,000 from the Borden Company Foundation.

EUGENE H. BYRNE HISTORY PRIZE FUND (1960). In memory of Eugene H. Byrne, Professor of History at Barnard College and Executive Officer of the Department from 1931 to 1949, by his wife, Janet M. Byrne, and friends. Awarded for superior work to an undergraduate majoring in history. \$3,604.

HELEN MARIE CARLSON FRENCH PRIZE FUND (1965). In memory of Helen Marie Carlson by her family and friends. Awarded to the student who writes the best composition in third-year French (French 5), the course which Miss Carlson directed for many years, or a similar course at the discretion of the department. \$3,009.

THE COLUMBIA UNIVERSITY PRESS PRIZE. A copy of the Columbia Encyclopedia is awarded by the Columbia University Press to the member of the sophomore class who has done the best writing for Barnard Bulletin.

HELEN R. DOWNES PRIZE (1964). In honor of Professor Emeritus Helen R. Downes '14, Chairman of the Barnard College Department of Chemistry from 1945 to 1960, by former students and friends. Awarded at the end of her senior year to the student who, in the opinion of the Pre-Medical Committee, shows greatest promise of distinction in medicine or the medical sciences. \$1,893.

THE JENNY A. GERARD MEDAL (1908). The Jenny A. Gerard Gold Medal, given by the Society of the Colonial Dames in America in memory of Mrs. James Gerard, late President of the Society, is awarded annually to the student who is most proficient in Colonial history.

GERMAN PRIZE FUND (1950). Awarded at the end of her junior year to an outstanding student majoring in German. In case the winner does not need scholarship help, the award shall be a prize of \$100 and the balance of the scholarship may be given to another able student majoring in German. If in any year no student qualifies for the award, it may be deferred and given to one or more qualified students at a later date. \$12,000.

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KATHARINE REEVE GIRARD PRIZE (1964). In memory of Katharine Reeve Girard '33 by her husband, Professor Richard A. Girard, and her friends. Awarded by the Faculty Committee on Honors to a student whose interests are in the international aspects of the work in her major field. \$955.

HERRMAN BOTANICAL PRIZE FUND (1892). Mrs. Esther Herrman. Awarded to the most proficient undergraduate student in biology. \$1,000.

MEDAL OF THE HISPANIC INSTITUTE IN THE UNITED STATES. Awarded to an undergraduate for the best essay on Cervantes.

FREDERIC G. HOFFHERR FRENCH PRIZE FUND (1961). In memory of Frédéric G. Hoffherr, Associate Professor of French from 1936 to 1955. The income is awarded annually to a student in Intermediate French (Course 4) for excellence in oral French. The prize is offered to encourage proficiency among students who are not themselves of French background. The winner is chosen on the basis of a contest sponsored by the French Department. \$1,025.

THE ELIZABETH JANEWAY PRIZE FOR PROSE WRITING. A prize of \$500 awarded annually. Open to all undergraduates for a work of prose, whether fiction or non-fiction, which gives the greatest evidence of creative imagination and sustained ability. All undergraduates who intend to enter the prize competition must notify the Chairman of the English Department of their intention to do so by November 1, at which time they will receive detailed instructions as to the requirements. The final manuscripts must be submitted to the chairman by March 15. The prize will be given at the discretion of a board of three judges chosen by the College and the donor.

ELEANOR KELLER PRIZES (1968). By bequest of Marguerite Mespoulet. One prize, not exceeding \$1,000, to be awarded annually to a member of the junior class, not necessarily a French major, who has an outstanding record in courses of French literature offered by the department. Another prize, not exceeding \$1,000, to be awarded annually to a member of the senior class, not necessarily a French major, who has an outstanding record in courses concerned with French culture. \$42,474.

AMY LOVEMAN MEMORIAL FUND (1956). In memory of Amy Loveman '01, by her friends and classmates. First charge on the income shall be an annual prize of \$100 for the best original poem by a Barnard undergraduate. Terms of the competition will be announced later. The balance of the income shall be allocated to scholarships and shall be known as the Amy Loveman Scholarship. \$20,100.

THE LENORE MARSHALL PRIZES FOR WRITING (1960). For excellence in poetry and prose contributed to the undergraduate magazine, *Focus*. Adjudged by the donor, Mrs. Marshall, in consultation with the Department of English and the editors-in-chief, and awarded to promising young writers in need of financial aid. Two at \$50 each.

SIDNEY MINER POETRY PRIZE FUND (1962). In memory of Sidney Louise Miner '14, by bequest of Rosemary Alice C. Thomas. Awarded annually by the Department of English to the senior major who has shown distinction in the reading, writing, and study of poetry: the judges to be members of the Department of English. \$5,000.

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THE WILLIAM PEPPERELL MONTAGUE PRIZE FUND (1949). By William P. Montague, Lecturer, Instructor, and Professor of Philosophy at Barnard College from 1903 to 1949. Awarded to a student of Barnard College who, in the opinion of the members of the Department of Philosophy, shows promise of distinction in the field of philosophy. \$4,236.

THE HELEN PRINCE MEMORIAL PRIZE FUND (1921). In memory of his daughter, Helen C. Prince '22, by Julius Prince. Awarded to an undergraduate student for excellence in dramatic composition. \$1,200.

KATHARINE E. PROVOST MEMORIAL PRIZE FUND (1949). In memory of Katharine E. Provost. Miss Provost was for twenty-three years Secretary and Assistant to the Controller of Barnard College and, at the time of her death, Superintendent of Buildings and Grounds. Awarded for superior work by an undergraduate major in economics. \$1,000.

CAROLINE GALLUP REED PRIZE FUND (1916). In memory of her mother, Mrs. Sylvanus Reed, by Mrs. William Barclay Parsons for the recognition of *outstanding work either in the field of the origin of Christianity and early church history or in the general field of the history and theory of religion*. Awarded to the student who shows the highest excellence in one of these fields of work. The award is made partly on the basis of an essay to be handed in by April 1. Details regarding the scope of the essay may be obtained from the Department of Religion. \$1,000.

MARIE REIMER SCHOLARSHIP FUND (1953). In honor of Professor Emeritus Marie Reimer, for many years Chairman of the Barnard College Department of Chemistry, by former students and friends. Awarded annually at the end of her junior year to an outstanding student majoring in chemistry. In case the winner does not need financial help, the award shall be a prize, the amount to be recommended by the Chemistry Department. The balance of the income shall be awarded by the Director of Financial Aid to an outstanding student at the end of her junior year who is majoring in chemistry and who has financial need. The students receiving financial aid from this fund shall be informed of the source of the award. \$5,035.

BETTINA BUONOCORE SALVO PRIZE FUND (1966). By bequest of Bettina Buonocore Salvo '16. Awarded annually to a deserving graduate or other student studying Italian, selected by the Department of Italian. \$5,000.

SYLVIA KOPALD SELEKMAN PRIZE FUND (1960). In memory of Sylvia Kopald Selekman '20, by Janet Robb. Awarded by the Department of Economics to the freshman who is doing the best work in introductory economics. \$1,000.

SPANISH PRIZE (1959). To be awarded annually to a Spanish major who, in the opinion of the department, has done the most distinguished work in the Spanish language and literature. A prize of \$100, the income on the Spanish Prize Fund of \$2,500.

SPERANZA ITALIAN PRIZE FUND (1911). In memory of Carlo Leonardo Speranza, Instructor and Professor of Italian at Barnard College from 1890 to 1911, by a former student. Awarded to a student for excellence in Italian. \$1,000.

STAINS-BERLE PRIZE FUND IN ANGLO-SAXON (1968). In memory of her grandmothers, Caroline Foy Stains and Katharina Nohrherr Berle and in honor

BARNARD COLLEGE

of Professor Cabell Greet, by Katherine G. Stains '52. Awarded annually to an undergraduate student for excellence in Anglo-Saxon language and literature. \$1,000.

JEAN WILLARD TATLOCK MEMORIAL PRIZE FUND (1917). In memory of Jean Willard Tatlock '95, by her friends. Awarded to the undergraduate student most proficient in Latin. \$1,250.

ROSEMARY THOMAS PRIZE FUND IN FRENCH (1966). In honor of the poet Rosemary Thomas, by bequest of Helen Marie Carlson, a long-time member of the Barnard College French Department, the income to be awarded annually to the undergraduate student preferably, but not necessarily, a French major, who, in the opinion of the members of the Barnard College French Department, has shown the greatest evidence of a special sensitivity and awareness in her study of French poetic literature. \$10,050.

VON WAHL PRIZE (1915). In memory of Constance von Wahl, '12, President of the Undergraduate Association. Awarded to a student for excellence in biology, on the understanding that it is to be used to advance her knowledge in that field. If in any year no student stands out as eminently deserving of the prize, it is not awarded. \$1,300.

The following prizes of Columbia University are by their terms open to students of Barnard College:

THE ACADEMY OF AMERICAN POETS PRIZE: A prize of \$100, established by the Academy of American Poets for the best poem or group of poems by a student. Awarded by the Department of English of Columbia University at the close of the Spring Term. Manuscripts should be submitted prior to April 1. For further information consult the Chairman of the Department of English and Comparative Literature of the University.

BENNETT PRIZE. A prize established through a gift of \$1,000 from James Gordon Bennett may be awarded by the Faculty of Political Science, with the approval of the Chairman of the Bennett Prize Committee, for the best essay upon some subject of contemporary interest in the domestic or foreign policy of the United States. The competition is open to students not holding a Bachelor's degree who pursue satisfactory courses in political science. Manuscripts should be submitted prior to the last day of classes of the Spring Term. For additional information consult Professor Joseph A. Rothschild.

THE BUNNER MEDAL. The H. C. Bunner Gold Medal, in memory of Henry Cuyler Bunner, is awarded at Commencement to the candidate for a Columbia degree who shall present the best essay on any topic dealing with American literature selected in connection with course or seminar work in American literature and approved by the Chairman of the Bunner Prize Committee. For additional information consult Professor Carl Hovde.

EARLE PRIZE IN CLASSICS. A prize of \$50, in memory of Mortimer Lamson Earle, Instructor in Greek in Barnard College from 1889 to 1895 and from 1898 to 1900 and Professor of Classical Philology from 1900 to 1905, is awarded to a candidate for the degree of Bachelor of Arts, for excellence in sight translation of passages of Greek and Latin. For further information consult Professor James A. Coulter.

HONORS

THE CAROLINE PHELPS STOKES PRIZE. The Caroline Phelps Stokes Prize of about \$45 is awarded at Commencement to that student who has been a degree candidate for at least one academic year in Columbia College or Barnard College and who has written the best essay on any topic approved by the Stokes Prize Committee, which has been presented in course or seminar work. Material should be submitted by January 1. For additional information consult Professor Joseph A. Rothschild.

VAN RENSSELAER PRIZE. To the candidate for a degree in Columbia University who is the author of the best example of English lyric verse. Material must be submitted by April 1. Applicants should submit not more than three poems of their own choice, aggregating not more than twenty pages. Income of the Marianna Griswold Van Rensselaer Fund, about \$50. For additional details consult the Department of English and Comparative Literature.

WOODBERRY PRIZE. Established by the Woodberry Society as a memorial to George Edward Woodberry. Awarded every second year to an undergraduate student of the University for the best original poem. Material must be submitted by April 1. Applicants should submit not more than three poems of their own choice, aggregating not more than twenty pages, unless a single poem is submitted in excess of that amount. If, in the opinion of the committee of judges, no poem submitted in any prize year is worthy of this award, the prize will not be given. Awarded in 1969-70. Value of prize about \$100. For additional details consult the Chairman of the Department of English and Comparative Literature.

The following prize is also open to Barnard students:

SUSAN HUNTINGTON VERNON PRIZE. A prize of about \$25, the annual income of the fund established in 1941 by pupils and friends of Mrs. Vernon, in tribute to her work at the Hispanic Institute, and augmented by her in 1943. The prize is awarded, on recommendation of the Chairman of the Department of Spanish, for the best original essay written in Spanish by a senior whose native language is not Spanish, but who is taking language courses at Barnard, Mount Holyoke, Radcliffe, Smith, Vassar, or Wellesley.

XII. Associate Alumnae of Barnard College

The Associate Alumnae of Barnard College is made up of nearly fifteen thousand members from all states of the Union and more than sixty foreign countries. The Associate Alumnae serve the College in three important ways: by interpreting Barnard to the community; by keeping local secondary school students informed about Barnard; and by aiding in the support of the College.

The Alumnae Association functions through a group of officers, directors, and alumnae trustees elected by members of the Association. The central office of the Associate Alumnae is 118 Milbank Hall.

Barnard College Clubs, the Alumnae Council with nationwide membership, and a group of qualified and authorized alumnae make it possible to find spokesmen for Barnard at distances far from New York. Students who are considering Barnard may find it helpful to talk personally with the Barnard alumnae living nearest them. A list of these representatives as well as officers of the Associate Alumnae is given below.

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XIII. Statistics†

UNDERGRADUATES, REGULAR:

1889	1889	1909	1914	1919	1924	1929	1934	1939	1944	1949	1954	1964	1965	1966	1967	1968	1969
to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to
1890	1900	1910	1915	1920	1925	1930	1935	1940	1945	1950	1955	1965	1966	1967	1968	1969	
.....	40	62	123	87	126	227	181	164	208	260	245	355	375	361	437	420	
.....	40	122	110	190	259	237	220	191	314	277	340	414	394	475	522	568	
.....	37	109	191	193	234	247	226	210	314	272	317	391	447	504	475	493	
14	54	188	240	224	271	311	267	246	324	271	304	415	454	459	457	458	
....	....	....	....	....	57	54	103	143	56	17	1	8	14	25	23	23	
14	171	481	664	694	947	1076	997	954	1216	1097	1207	1583	1684	1824	1914	1962	

SPECIAL STUDENTS:

[illegible]

GRADUATE STUDENTS (1890-1900)

22	62	54	69	61	33	28	29	31	21	15	20	19	11	11	21	27
82	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
36	315	535	733	755	980	1104	1026	985	1237	1112	1227	1602	1695	1835	1935	1989

DEGREES CONFERRED:

[illegible]

† These figures represent registration in the Autumn Term plus students admitted in the Spring Term.

XIV. Examination Groups

Group (1) M W F 9

Biology 1-2

Biology 6

Economics 17, 18

Philosophy 1x, 1y (I)

Group (2) M W F 10

Art History 51; 52

Art History 81, 82

Chemistry 51; 54

Economics 1; 2 (I)

English 66; 67

English 90

French 23, 24

French 33

French 42

Geology 1; 2

German 4x

German 5y

Greek 11; 12

History 12 (I)

History 25; 26

History 51; 52

Mathematics 7, 8

Mathematics 35; 36

Philosophy 1x, 1y (II)

Philosophy 35; 36

Political Science 23, 24

Psychology 9; 12

Psychology 25

Sociology 1-2 (I)

Sociology 32; 47

Sociology 40

Spanish 25, 26

Group (3) M W F 11

Art History 67

Chemistry 41, 42

English 51; 52 (I)

English 63; 64

French 31

French 36

History 57; 58

Latin 3; 4

Latin 33

Music 1-2 (I)

Philosophy 1x; 1y (III)

Philosophy 43

Political Science 1, 2

Psychology 27; 30

Sociology 1-2, II

Sociology 21; 22

Spanish 5-6

Spanish 14

Spanish 15-16

Group (4) M W F 1:10

Art History 43, 44

Biology 8y, 15

Classical Lit. 35

Economics 7; 8

English 51, 52 (II)

English 68

French 21y

German 1y-2x

German 3y

History 19; 20

Music 1-2 III

Philosophy 5

Psychology 17

Psychology 20; 21

Russian 9, 10

Group (5) M W F 2:10

Art History 1-2

Art History 53, 54

Biology 10

Classical Lit. 32

Economics 25, 26

Economics 29; 30

English 69; 88

English 77; 78

German 11

German 26

History 11

History 12 (II)

Greek 1-2

Latin 1-2

Linguistics 21-22

Music 1-2 (III)

Philosophy 38

Philosophy 75

Philosophy 85

Political Science 11

Political Science 30; 32

Sociology 1-2 (III)

Sociology 34x

Sociology 48

Spanish 13y

Spanish 31-32

Group (6) Tu Th 9:10-10:25

Anthropology 1-2
Art History 67
Chemistry 1; 8
Economics 1, 2 II
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French 48
German 16
History 13; 14
Mathematics 31; 40
Philosophy 8; 41
Political Science 13; 14
Political Science 25; 26
Psychology 16
Psychology 38
Sociology 1-2 (IV)
Sociology 2y

Group (7) Tu Th 10:35-11:50

Art History 61
Art History 70
Biology 5
Biology 12
Chemistry 52
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French 22x
French 31
French 34
German 32
History 3, 4
History 54
Philosophy 1x; 1y (IV)
Philosophy 77
Physics 3-4
Political Science 7
Political Science 18
Religion 15, 16
Sociology 33y
Spanish 17; 18

Group (8) Tu Th 11

Biology 7
English 73
Geography 3; 4
Psychology 5; 8
Psychology 57; 68
Sociology 41; 42

Group (9) Tu Th 2:10-3:25

Art History 63
Art History 66

Chemistry 44
Economics 1, 2 III
Economics 16
English 79; 80
English 83
English 86
French 35
French 40
German 15
German 55y
German 56
History 21; 22
History 27, 28
Philosophy 2x; 2y
Philosophy 32; 47
Philosophy 82
Political Science 12
Political Science 19
Religion 25y; 26
Sociology 43, 44
Sociology 46
Spanish 20; 23

Group (10) M W F 3:10

Art History 77; 78
History 65y

Group (11)

Psychology 1x or 1y (Sections)

Group (12)

English 72
Music 1-2 (II)
Philosophy 1x; 1y (V)

Group (13)

Art History 75, 76
Art History 91, 92
Economics 33
Economics 3-4
Modern Greek 1-2
Modern Greek 3, 4

Group (14)

French 1-2 (Sections)
French 2x
French 3; 3y
French 4; 4x
French 20 (Sections)
French 20x
French 21-22

Group (15)

German 1-2 (Sections)
German 3, 4 (Sections)
German 5; 6 (Sections)

Group (16)

Spanish 1-2 (Sections)
Spanish 3; 4 (Sections)
Spanish 7; 8 (Sections)
Russian 1-2 (Sections)
Russian 3-4 (Sections)

Group (0)

American Studies 1-2
American Studies 3-4
Anthropology 41-42
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English 13; 14
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English 33, 34

English 35; 36; 40

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English 93 (93y)
English 97; 98
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French 18
French 51; 52
French 54
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Philosophy 39; 40
Philosophy 87-88
Political Science 4
Political Science 20; 27
Political Science 28x; 30
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BEQUEST FORM

General

I, _____, give and bequeath to Barnard College in the City of New York the sum of _____ for the uses and purposes of the said Corporation.

Endowment

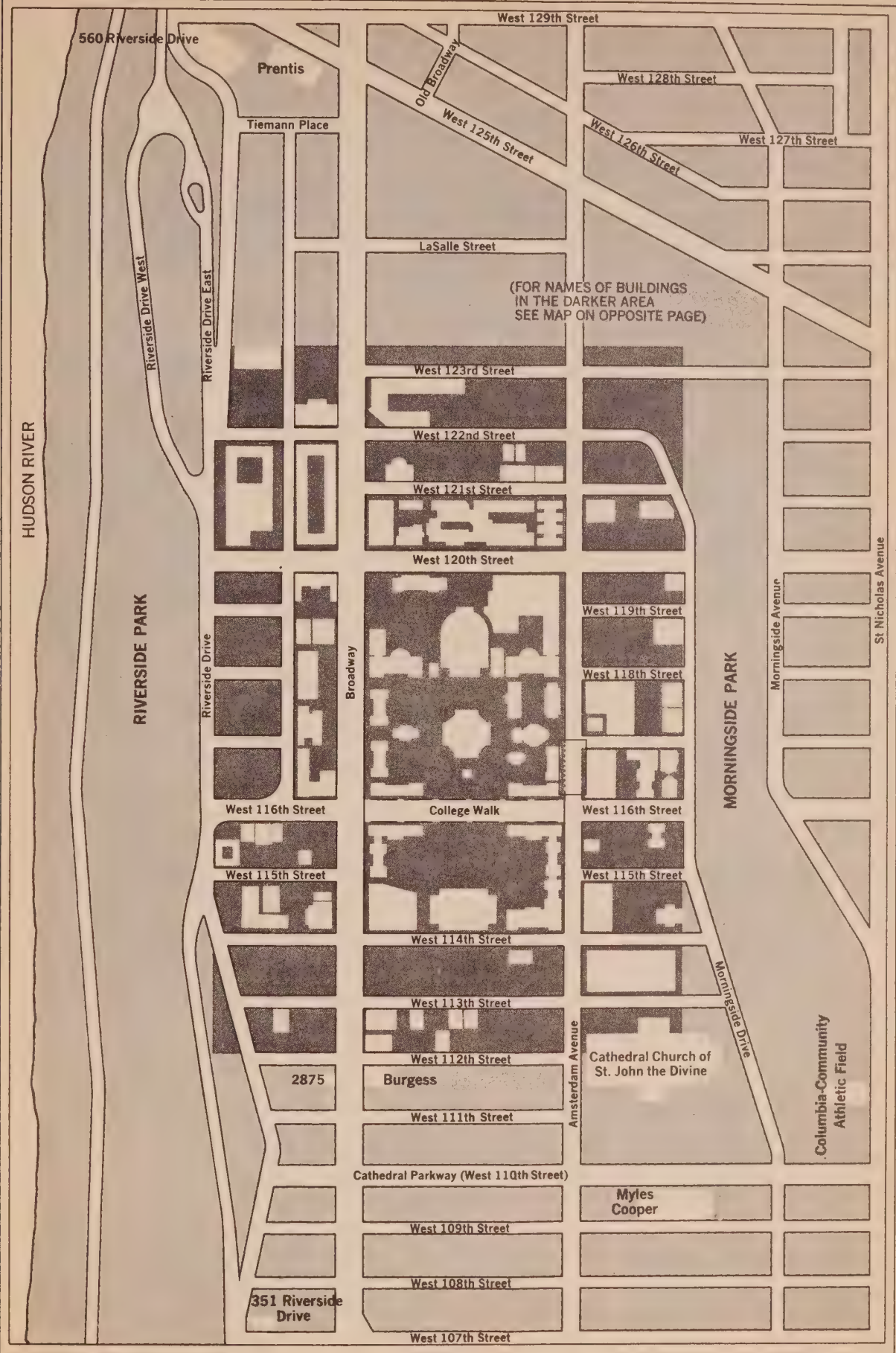
I, _____, give and bequeath to Barnard College in the City of New York the sum of _____ to be added to the General Endowment of the said Corporation.

For a Specific Purpose

I, _____, give and bequeath to Barnard College in the City of New York the sum of _____ to be used for the purposes of _____

_____ to be known as the _____ Fund. If at any time in the judgment of the Trustees of the said Corporation, the need of income for such purposes no longer exists, the Trustees of the said Corporation shall be, and hereby are, authorized to use the income from the Fund for such purposes as shall in their judgment promote the interests of the College.

The Morningside Heights Area of New York City



The Morningside Campus & Environs



